THE CITY OF
HAMILTON

Economic Development Strategy Report

Hamilton's Clusters of Innovation

FINAL REPORT

May 2002

Economic Development Strategy Report

Table of Contents

Foreward 3

Executive Summary 4

The Basis for Cluster Development in Hamilton 7

ECONOMIC ANALYSIS

Traditional Clusters:

- Industrial Manufacturing 10
- Agri-business 19

Emerging Clusters:

- Aerotropolis (development surrounding the airport) 23
- Health & Biotechnology 30
- Information & Communications Technology 39
- Film 48

Downtown: 52

ECONOMIC DEVELOPMENT TOOLS

- Brownfield Redevelopment 58
- Small Business Enterprise Centre 63
- Hamilton Incubator of Technology 70
- Economic Development Information Systems 74
- Quick Response Team 77
- Hamilton Human Resource Strategy Study 78

Summary of Deliverables for Industry Sectors 81

FORWORD

In February 2001, Hamilton's City Council authorized and directed staff to commence work on an integrated growth strategy (GRIDS) for the then New City of Hamilton. GRIDS is a complex, interdependent, multi-staged process involving four of the City's departments: Transportation Operations Environment, Planning & Development, Finance & Corporate Services, and Economic Development. The primary significance of an integrated growth strategy is that it combines the resources and the actions of these departments and focuses them on a single vision. For the first time in the City/Region's history, the municipality's Infrastructure Master plans, Official Plan, Capital Budget and Economic Development Strategy will be working in harmony.

GRIDS will have both immediate and long-term impacts on residential and non-residential growth in Hamilton. In essence, it is an entirely new philosophy for development and one that is strongly grounded in the principles of "smart growth" and Vision 20/20. There is no doubt that the implications of GRIDS will influence the quality of life in Hamilton, which incidentally, is regarded as one of the community's inherent strengths. However, it is the ultimate goal of this process that it will maintain and improve on that quality of life.

The Economic Development Strategy is but one component of the larger GRIDS process. It focuses only on non-residential growth and in particular, industrial development. Although Tourism remains an important component of municipal economic development, it remains marketing focused and has few implications on infrastructure. For this reason, and the fact that the City has a new public/private board chartering a new course for Tourism, it will not be referenced in this document.

For the purposes of this strategy, commercial development and residential growth are viewed as being essentially market driven and a function of the level and nature of the industrial development in the city. Simply put … without sustainable, high skilled, wealth-generating businesses in Hamilton, there is little reason to believe that there will be corresponding residential growth and the growth in commercial/retail businesses to service it.

Economic Development Strategy Report

Executive Summary

The Economic Development Strategy is a twenty-year vision in which Hamilton will possess a diversified, sustainable economic base consisting of globally competitive wealth creating companies that employ a highly skilled, well-educated labour force. It is the first step in the GRIDS process that will examine planning, servicing and financial implications of growth, and incorporate the development of the City's Social Vision and the Culture and Recreation Master Plan. The objective of the GRIDS process is to balance the competing interests of growth in the city with the purpose of establishing an enviable quality of life.

The Economic Development Strategy is rooted in the theory of cluster development. A "cluster" is defined as "a geographic concentration of competing and co-operating companies, suppliers, service providers and associated institutions".[1] Hamilton's own industrial history provides evidence of its success with the presence of a "steel cluster".

The Strategy recommends that the City of Hamilton focus on six industry clusters:

Traditional Clusters

- **Industrial Manufacturing**
- **Agri-Business**

Emerging Clusters

- **Aerotropolis (development surrounding the airport)**
- **Health & Biotechnology**
- **Information and Communications Technology**
- **Film**

These clusters were not selected arbitrarily, but are the result of considerable research and the fact that Hamilton possesses inherent strengths in these areas. Professor Michael Porter of Harvard University is the recognized authority on cluster development and confirms this logic..."cities should not attempt to pick winners or try to create new industries where there are no pre-existing advantages to build upon".

This report identifies "deliverables" for each of the above-noted clusters, as well as a profile of what types of companies are expected to dominate their composition.

[1] Clusters of Innovation Initiative: San Diego Report, Professor Michael E. Porter, Harvard University, Council on Competitiveness, Monitor Group, ontheFrontier.

The Industrial Manufacturing sector is and will continue to be a significant contributor to Hamilton's economy. Most notably, this sector is experiencing a shift from the presence of large multi-national firms, to value-added manufacturing in mid-sized firms. Brownfield redevelopment tools will play an important role in revitalizing the city, particularly the industrial lands along the city's waterfront.

Agricultural lands are a large component of the city's total landmass. Decisions to expand the urban boundary or rezone agricultural lands for other uses will have major implications on rural development and agri-business. A study examining the economic impact that agriculture and agri-business have on the location and nature of agriculture in Hamilton is now underway.

As an emerging cluster, the development of an aerotropolis is the number one strategic priority for economic development in Hamilton. An "aerotropolis" is defined as a master planned community that develops around an airport – including industrial, commercial and residential development. Continued success of the airport will have reciprocal benefits on all the sectors examined. The key conclusion from the research undertaken in all clusters, is that energy and money needs to be directed to the development of the airport and its adjacent lands. And because of the many planning hurdles to be crossed, work needs to commence immediately.

The other emerging clusters; namely, Health and Biotechnology, Information and Communications Technology, and Film are already in various stages of development. The city's assets and infrastructure have set the stage for the emergence of these clusters. Coupled with participation from community leaders, they are rapidly gaining lives of their own. Participation from council will serve to build momentum that is needed to sustain cluster development in these sectors.

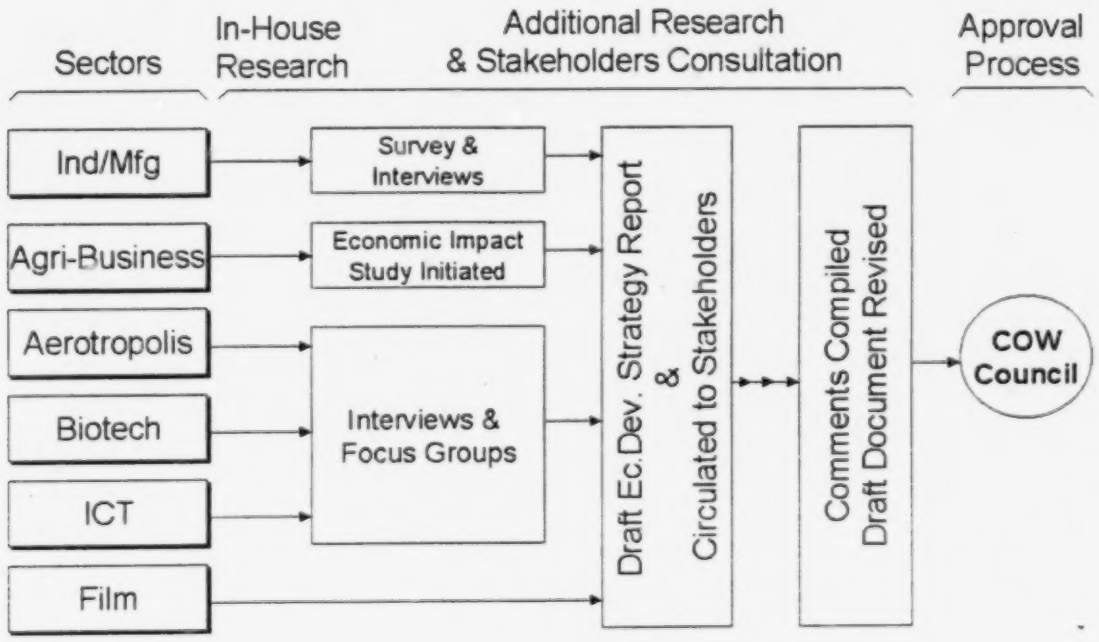
There is a strong interdependence between the traditional and emerging sectors and their growth affects the entire city, including the prosperity of the downtown core. For example, there are many applications and linkages of the Information Communications Technology cluster to biotechnology and production technology. Similarly, the presence of a 24/7 cargo and passenger airport impacts every one of the identified clusters. More than anything else, cluster development promotes productivity and innovation - without these there is no chance for prosperity.

This Economic Development Strategy is the product of a significant amount of research including direct input in the form of focus groups and personal interviews with the major stakeholders in each cluster (see process outlined on Page 6 of this report). Council endorsement of the strategy is a prerequisite for its implementation but the ultimate success of the strategy will be determined not only by City Council's commitment, in terms of allocated resources, but with individual City Councillors becoming champions of specific clusters.

Finally, the recipe for any successful economic development strategy has one similar ingredient - community ownership. The groups that make this city work, namely business, labour, government and education, must support this plan. Alignment of the

plan with the efforts of these groups is absolutely critical to its success - especially, education that will provide the human capital required to make these clusters prosper and generate wealth for the City of Hamilton.

Economic Development Strategy Process



104-00308/

Economic Development Strategy Report

The Basis for Cluster Development in Hamilton

Hamilton's Economic Development Challenge

Hamilton has always been considered a manufacturing centre, even as far back as the City's incorporation in the mid-nineteenth century. It first thrived as a centre for textile production and later was transformed into a steel and metals manufacturing capital. Location advantages such as transportation, cheap power, and access to markets were the predominant factors that fuelled the growth of one of Canada's largest economic engines.

The post World War II era witnessed Hamilton's manufacturing prominence reach its apex. In addition to the country's two largest integrated steel producers, the city became the manufacturing centre and Canadian headquarters for a number of U.S. based multi-nationals. Companies such as Westinghouse, International Harvester, Firestone and Procter & Gamble dominated the industrial landscape. Similarly, Canadian owned manufacturing companies such as Inglis and Camco expanded their local operations in order to supply durable goods for a growing domestic market. As a result, the city's port and transportation infrastructure grew to meet the pressures of the demand for raw materials and the ability to ship manufactured finished product to markets throughout southern Ontario, the U.S. "rust belt" and overseas.

Today, the global marketplace has changed the way companies do business. Hamilton's economy has been subjected to major structural changes that are dramatically impacting the City's industrial composition. The large U.S. branch plants, that were previously major employers in Hamilton, have either closed their local operations or rationalized production to other facilities throughout North America. Mid-sized manufacturing plants have grown to replace many of these large industrial giants. These firms, both locally and externally owned, have focused their investment & marketing decisions in order to fill particular market niches and have evolved into export driven companies. Again, Hamilton's transportation infrastructure (road, rail, port & airport) and proximity to U.S. border crossings are significant site location advantages for these medium-sized operations and their raison d'être. But is this trend of mid-sized manufacturers sufficient to replace the value-added manufacturing companies lost in Hamilton over the last 20 years?

Just like investment capital, companies in today's business environment are highly mobile. Location plays a major role in site selection but so does the cost competitiveness and skilled labour supply of the community. In order to attract new business, retain and grow existing companies, Hamilton has to be able to provide

comparable business conditions not only with its neighbouring municipalities but other North American cities that, because of NAFTA, now form an integrated market.

In recent years, the realization of the benefits of industrial/commercial development to a community has spawned an escalation of competition between cities for attracting business. Financial incentives, free trade zones and tax abatements are but a few of the economic development tools being employed by municipal and provincial/state governments to increase their non-residential assessment base. Consequently, a municipality ultimately has to make the decision whether it wants to get into a global bidding war for new growth or choose an alternative economic development route.

Research indicates that today, greater numbers of municipalities are now opting out of the expensive world of incentives which erode a city's tax base, thus impairing its ability to provide the infrastructure necessary for growth. Instead, cities are focusing their resources and economic development efforts on "cluster development" strategies. A "cluster" is defined as "a geographic concentration of competing and co-operating companies, suppliers, service providers and associated institutions".[2]

Why a Cluster Strategy?

Clusters are essential to a region's prosperity because they increase the productivity of companies in the area, drive the pace of innovation, and stimulate the formation of new businesses. Typically, clusters are associated with wealth generation and highly skilled, well paying employment – exactly the type of development every municipality strives to attain. But cluster-based economic development is about more than the creation of jobs. The cluster model contends that economic growth requires "quality foundations", which include the physical and social infrastructure of the community. Cluster-based development makes clear that economic progress is not possible unless attention is paid to skills development, social needs and the quality of life of the community.

Cluster development is gaining momentum in today's economy. With a global perspective, cluster strategy focuses on the identification of a city's distinctive economic advantages and related industries. Thus, it provides an efficient method by which cities can target their economic development activities. It allows municipalities to create their own "diversified portfolios" that can weather the ups and downs of economic recessions.

In order for clusters to be competitive, a municipality must create an environment conducive to growth. The role of government in cluster development is to:

1. Improve the quality of inputs that firms draw on such as human resources, physical and technological infrastructure, and capital;
2. Create rules and regulations that encourage innovation and upgrading;
3. Build and support the formation of clusters; and

---

[2] Clusters of Innovation Initiative: San Diego Report, Professor Michael E. Porter, Harvard University, Council on Competitiveness, Monitor Group, ontheFrontier.

4. Raise the sights of local firms and citizens by articulating an economic vision for the future[2].

Extensive research undertaken by the U.S. Council on Competitiveness reinforces the long-term nature of cluster development and suggests that local government assume a stewardship role for segments of the long-term plan – monitoring, supporting and adapting it over a multi-decade timeframe.[3]

Hamilton's Clusters of Innovation

Hamilton's City Council decision in February 2001 to pursue an integrated growth strategy with a particular focus on the development of economic clusters was a significant first step on the road to recapturing some of its past economic stature. Cluster development will employ a strategic targeted approach to economic development as opposed to past undirected efforts to secure any company interested in the location advantages of the city.

This document presents a strategic plan for the New City of Hamilton's economic development program. It identifies two traditional clusters and four emerging clusters each with short, medium and long-term deliverables required to achieve a long-term vision for the city. There are obvious linkages between the clusters and there are others that will develop over time. And while there is the potential for some conflict between clusters, the common thread is that innovation and competitiveness in each area will benefit the community as a whole.

A Twenty-Year Vision for the City of Hamilton

The Economic Development Strategy is a twenty-year vision in which Hamilton will possess a diversified, sustainable economic base consisting of globally competitive wealth creating companies that employ a highly skilled, well-educated labour force.

The Economic Development Strategy is the first step in the GRIDS process that will examine planning, servicing and financial implications of growth, and incorporate the development of the City's Social Vision and the Culture and Recreation Master Plan. The objective of the GRIDS process is to balance the competing interests of growth in the city with the purpose of establishing an enviable quality of life.

---

[3] *Clusters of Innovation: Regional Foundations of U.S. Competitiveness, October 2001.*

Industrial Manufacturing

Traditional Cluster

Introduction

Heavy industry and manufacturing are synonymous with the City of Hamilton. Historically, the City's location coupled with the presence of Canada's two largest integrated steel mills were the foundation for attracting and expanding the manufacturing sector. The Port of Hamilton grew to meet the demands of local industry and soon became the largest port (cargo tonnage) on the Great Lakes. Hamilton's ability to offer inter-modal transport, particularly rail and road to complement the Port, positioned the City as the premiere location in the 1960's for large scale manufacturing industries.

Once known as the "manufacturing capital of Canada", the dominance of multi-national manufacturers in the local economy has dwindled over the last twenty years. For example, Westinghouse Canada, headquartered in Hamilton, employed over 10,000 people at its peak. Companies such as Otis Elevator, Procter and Gamble, Domglas and International Harvester all contributed to the City of Hamilton having one of the highest growth rates and per capita incomes in the country during the 1960's and 1970's. Although many of these firms are no longer operational in Hamilton, the industrial history of the city has proven that a strong manufacturing sector is an essential economic engine to create wealth and tradable value.

Today, the Industrial Manufacturing sector remains a major assessment generator for the City. The Hamilton Port Authority estimated that 31% of the total jobs in the city are dependent on, and affected by, the port area that makes up this industrial core. Further, the significance of the port area on the economy of Ontario as a whole is estimated (for 1999) at $1.2 billion or almost 4% of Ontario's GDP.[4]

The emergence and growth of numerous smaller and medium sized manufacturing operations, the locational factors and existing industrial base, are still sufficient to grow and attract new industry and manufacturers to the City. A targeted, strategic approach to industrial development combined with the proper economic development tools (e.g. Brownfield redevelopment) will be able to produce results and again create growth in this sector.

[4] Hamilton Port Authority, Economic Impact Study, 2001

INDUSTRY OVERVIEW

Definition

For the purposes of this report, the Industrial Manufacturing cluster is defined as those companies that physically manufacture a product or provide ancillary services to the manufacturing sector. In Hamilton, this area is "clustered" around the port and extends along the industrial corridor out to Stoney Creek, and includes the City industrial business parks.

The industries that have remained and thrived in Hamilton have made the transition from labour intensive companies manufacturing product for the domestic market, to firms that are specialized and capital/technology intensive, manufacturing product for both the domestic and export market. Location and transportation are critical to the success of these companies especially with JIT (just-in time) manufacturing systems having been adopted as the new industry standard. Hamilton's strategic location enables local companies to have quick access to both Canadian and U.S. markets. In excess of 120 million consumers are within a day's drive of the City of Hamilton. Additionally, companies in the 21st century simply cannot be burdened with an uncompetitive cost environment (high municipal & federal taxes) or their comparative advantage is lost. Cost competitiveness is an essential element for stability and growth of the local manufacturing economy.

Industry Structure

Canada's industrial manufacturing base remains for the most part comprised of resource-intensive companies but it has lost considerable ground in the development and growth of higher value-added industries. Additionally, industrial clustering in an integrated North American market is now having pronounced implications on the manufacturing and ancillary services environment in Canada. The primary concern for economically small, developed countries like Canada is that trade liberalization is encouraging productive resources to migrate to larger and/or lower cost economies. Multi-national firms are now rationalizing production across geographic locations and clusters to take advantage of different cost structures. Hamilton's competition in terms of attracting and retaining manufacturers is no longer restricted to neighboring Ontario municipalities but now includes cities in Mexico and "right to work" states in the southern United States.

In an Ontario economy that is driven by the automotive sector - the cyclical nature of this industry generally dictates the economic health of the entire province. And Hamilton is not immune to any of the negative impacts having its share of automotive parts manufacturers and a local steel industry that claims the "Big Three" as customers. The remainder of Hamilton's industrial base is geared to the production of durable goods for the consumer market and component materials for other manufacturers.

TOP FIVE INTERNATIONAL EXPORTS, 1999 (% of Total Exports)	
Motor Vehicles, parts	41.1
Machinery & equip.	12.1
Electrical Machinery	5.0
Plastics & parts	3.1
Non-ferrous metals	3.1
TOTAL	**64.4**

Source: Ontario Ministry of Finance, May 2001

Finally, the proximity to the U.S. border and the prevailing low exchange rate of the Canadian dollar has resulted in Canadian companies (and particularly those in Hamilton) orienting more of their production to the export market. The ability to sell into a market 10 times the size of the domestic market has resulted in Canadian companies investing in larger scale operations to achieve economies of scale in production. In 1999, 93.5% of all international exports of Ontario manufactured goods were destined for the United States. However, most economists agree that the value of the Canadian dollar cannot be the only factor that contributes to the comparative advantage of Canadian based industries. These firms must possess a technological or knowledge based advantage.

Environmental Scan

Hamilton's Industrial Manufacturing cluster has an estimated $12 Billion annual impact on the provincial economy or the equivalent to 4% of Ontario's GDP. Approximately, 85,000 direct and indirect jobs in Hamilton are attributable to this geographic cluster - that is one in three of all jobs in Hamilton or 77% of the City's *Goods Producing* Sector (see table below). As an economic engine, this cluster is responsible for injecting $5.6 billion annually in salaries & wages into the local economy and generating $110 million annually in municipal taxes or 15.3% of all taxes in the new city.

HAMILTON CMA EMPLOYMENT BY INDUSTRY (000's)	
Goods Producing:	
Manufacturing	77.2
Construction	19.7

Agriculture	6.3
Other	2.5
TOTAL	**105.7**
Services-Producing:	
Trade	53.0
Health Care/Social	36.3
Educational Services	24.8
Finance, Insurance, Real Estate and Leasing	22.4
Other Services	110.6
TOTAL	**247.1**

Source: HRDC Labor Market Review June 2001

The major industries that dominate this Industrial Manufacturing cluster include the following:

- steel and steel related (fabrication, machine shops, steel service centers) Sample *companies: Dofasco, Stelco, Slater Steel, Taylor Steel, Nelson Steel, Nova Steel;*
- heavy manufacturing (power generation, rolling stock, appliances) Sample *companies: Siemens-Westinghouse, National Steel Car, Camco;*
- general manufacturing (industrial textiles, automotive parts, food & beverage) Sample *companies: Orlick Industries, Tiercon, Coppley-Noyes-Randall Apparel, Fell-Fab, Trebor-Allan Candy;*
- storage, warehousing & distribution;
- aggregates; and
- chemicals.

Steel and the metals industry remains the largest employer in the manufacturing sector in Hamilton. Some 137 local companies are directly related to the steel industry. Stelco and Dofasco (Canada's 2 largest integrated producers) together employ approximately 14,000 people and account for more than 50% of all Canadian steel production. There are 11 steel processors, 10 metal recyclers, 49 companies that supply materials/services used in steel-making, and 63 companies that are end-users of steel.

The Port of Hamilton, as mentioned, is the number one port in the Great Lakes in terms of tonnage at 12 million metric tonnes per year. Approximately, 80% of all port traffic is related to the local steel industry. There are approximately 17,000 jobs linked directly to the Harbour, with 10 major shipping & distribution terminals and 9 companies directly involved in the provision of marine services. The Port has recently endeavored to diversify its activity with non-steel products (edible oils, grain, and fertilizers) and these goods are now starting to account for a greater percentage of the total port tonnage.

Major Trends and Issues

Closer economic integration in the North American and global markets is a major trend confronting manufacturing today. It has a particular impact on the mix of value-added activities in Canada by altering the size of industries in the country, the strength of the firms and their geographic location. It also makes existing companies more vulnerable to international comparative advantage, competitive pressures and the changing economic environment. The challenge is to ensure that Canada makes the infrastructure investments necessary to increase the efficiency of capital and labour.

Competitive pressures are a major issue facing Canadian and, more particularly, Hamilton based industry. This competition comes in two areas: 1) cost competitiveness, and 2) technological innovation. The former is an increasingly important factor as companies, like investment capital, are becoming more mobile. In a survey of the local manufacturing sector, commissioned by the Economic Development Department, there was unanimous agreement that the municipality, the province and the federal government must work at reducing the tax burden on industry and improving cost competitiveness. Further, the majority of companies stated that if the tax situation worsened locally, any company expansion or relocation would occur outside the municipal boundaries of Hamilton.

Technological innovation relates to the necessity for Canadian companies to focus on the manufacture of products that are human-capital and technologically intensive as opposed to the resource-intensive industries. Again, this is where economic integration and globalization have the greatest impact because Canada is now competing with countries like Brazil which is extremely competitive in both resource and labor intensive industries. Therefore, the Canadian based company must be producing high value-added products in order to secure and grow market share. An example of a value-added company in Hamilton is the Siemens Westinghouse Power Generation Plant. This operation takes raw materials, component parts and adds technology to produce a product that is sold world-wide - power generation turbines. Associated with this issue, is the specific problem of low investment in R & D in Canada and the slowness in channeling resources from low technology to high technology activities.

Human capital or skilled labour supply is also a major issue for manufacturing today. As the Canadian population pyramid becomes "top heavy", industry has a significantly smaller skilled labour supply from which to draw upon. The immediate result is wage pressures that in turn impact a company's cost competitiveness. Or alternatively, the replacement of labour with technology, that once again impacts a company's competitive position.

SWOT Analysis – Industrial Manufacturing

It is apparent that Hamilton has numerous *Weaknesses* and *Threats* as well as *Strengths* and *Opportunities* in this sector. Fortunately, many of the weaknesses/threats can be remedied at the local level. The strengths/opportunities all demonstrate that Hamilton does possess the necessary "building blocks" to regain some measure of its manufacturing prominence.

Strengths	Weaknesses
▪ Location - access to markets and proximity to U.S. border ▪ Transportation links - inter-modal transport, fresh water port ▪ Workforce - availability of skilled labour ▪ K-zoned land which permits heavy industry and outside storage ▪ Strong, synergistic backward & forward linkages for industry ▪ Access to world class university R & D facilities and expertise ▪ Quality of Life and cost of living	▪ Land use conflicts between residential and industrial uses ▪ Incomplete transportation links - completion of Red Hill Creek Expressway, and completion of Highway 6 by-pass to the Airport ▪ Contaminated properties which are uneconomical to remediate; large tax arrears with these sites ▪ Lack of large parcels of available, serviced industrial land - both greenfields and brownfields ▪ Approvals process and development delays ▪ High industrial tax rates - especially in relation to Golden Horseshoe

Opportunities	Threats
▪ Containerization of Port - attract port users from other Great Lakes locations ▪ Brownfields redevelopment programs - e.g. ERASE & tax arrears cancellation policies ▪ Non-traditional users - agricultural products processing, film production, telecommunications ▪ Manufacturing near or at the Hamilton Airport ▪ Hamilton as a destination for grid locked, GTA based manufacturers	▪ Impact of integrated markets and global competition - especially in steel ▪ Actions of other municipalities regarding tax policies/rates for industrial and commercial development ▪ Perception of Hamilton as a "labour dominated" city

Source: Hamilton Employer Survey, September 2001

Focus Groups

In August and September of 2001, the Economic Development Department (through a recognized local consultant) convened a series of focus groups and personal interviews with the major manufacturers, industrial realtors, and financial institutions in the City of Hamilton. The majority of their comments and input are reflected in the SWOT analysis for this sector. The following key recommendations emanated from these groups:

- Manufacturers believe that they are part of a mature economy and that more efforts should be placed on retention and growth of existing firms;
- City must designate large parcels of land for industrial development and they MUST be on/near a major highway (new Hwy #6);
- The City must complete the Red Hill Creek Expressway and aggressively pursue the Mid-Peninsula Corridor;
- Council must focus on making the City competitive (i.e. taxes) and economic development friendly;
- The need for a strategic vision with short term deliverables; and
- Hamilton's image needs to be improved in order to attract new companies.

Conclusions

There is simply no denying the importance of the Industrial Manufacturing cluster to the economic well being of the City of Hamilton. It continues to be the City's single largest source of industrial/commercial assessment.

The City of Hamilton's primary responsibility is to establish the right environment for its manufacturing cluster, which includes cost competitiveness, industrial land supply, and access to R & D facilities. Over the next 20 years, the economic integration of North America will advance markedly. The question is whether Hamilton's Industrial Manufacturing cluster will effectively make the transition to high value-added activities. The following plan can accomplish that goal.

CLUSTER PLAN FOR INDUSTRIAL MANUFACTURING

Vision

To increase the number of high value-added manufacturers and grow the existing industrial base in the City of Hamilton.

Profile of Future Companies in the Cluster

It is expected that Hamilton will experience growth in value-added companies that utilize technology to improve product and ensure JIT (just-in-time) requirements. Such companies include:

Autoparts Manufacturers (Tier 1 and Tier 2 suppliers)

Autoparts Engineering and Design Firms
Power generation Equipment and Systems
Paint, Coating and Adhesive Manufacturing
Engine, Turbine and Power Transmission Equipment
Aerospace Products and Parts Manufacturing
Electrical Equipment and Component Manufacturing
Steel Processing and Finishing
Rolling, Drawing and Tube Manufacturing of Purchased Steel
Forging and Stamping (high end)
Building Products Manufacturing (Drywall, Concrete, Hardware)
Industrial Textiles
Agricultural Products (grain, soya, edible oils, and fetilizer)
Storage, Warehousing and Distribution
Traditional (metal, plastics) and High Technology (bio-solids, soils biroremediation) Recycling

Cluster Plan Objectives

A number of short, medium and long-term deliverables were identified from the sector analysis and focus groups in order to achieve the objective. Many of the deliverables are policy or program based; only a few require significant infrastructure investment by the City of Hamilton. Some of the recommended deliverables will be echoed in other sectors such as the need for serviced lands around the airport.

Short-Term Deliverables:

- Continued reduction of non-residential property taxes - particularly for large industrial users;
- Development of an Industrial Information System - GIS inventory of both greenfield and brownfield properties ready for development;
- Installation of fibre-optics in the Ancaster Industrial Business Park;
- Completion of the Tradewinds Drive Extension - $1 million (approved) capital investment to extend major arterial road in the Ancaster IBP and open up additional 100 acres of industrial land;
- Approval and implementation of the ERASE tax arrears cancellation policy and Brownfield Development Charge Exemption Policy (per the approved policy direction from Council); and
- Improvements to the ERASE Community Improvement Program to reflect opportunities under the new Provincial brownfield legislation (Bill 56).

Medium-Term Deliverables:

- Creation and implementation of a marketing campaign targeted at key Toronto Port users to relocate to Hamilton;
- Upgrade of McNeilly Road - Stoney Creek Industrial Corridor;
- Servicing of industrial lands east of McNeilly Road;
- Final decision by Council on Perimeter Road;
- Completion of a development plan for the West Harbourfront;
- Approval and implementation of ERASE Municipal Property Acquisition Program; and
- Development of a new comprehensive zoning by-law and City Official Plan to address land-use conflicts and accommodate industrial growth area.

Long-Term Deliverables:

- Servicing and zoning of industrial land abutting Mid Peninsula Corridor; and
- Relocation of CN Rail Stuart Street Marshalling Yard.

Agri-business

Traditional Cluster

INDUSTRY OVERVIEW

Agriculture is one of the oldest sectors in the Canadian economy and is an important contributor to this country. Deeply rooted in history, agriculture has now become one of the most dynamic, high-tech industries in Canada.

This sector makes a major contribution to the high standard of living for Canadians, with over $22 billion in annual export sales. Trade is one of the many successes of the agri-food sector. Agriculture in Canada has a domestic consumer market worth approximately $90 billion. Over the last 35 years, the sector has been growing in strength, almost doubling its contribution to the Gross Domestic Product (GDP). Agriculture currently accounts for just below nine percent of the GDP and is one of Canada's top five industries. A larger number of Canadians rely on the agri-food sector for their livelihood accounting for more that one in seven jobs within Canada. The agriculture sector is the country's third largest employer.

Agriculture is a key economic sector that plays a vital role in the strength of the Canadian economy and makes a significant contribution to Canada's rural communities.

Local Analysis

In the newly amalgamated City of Hamilton, the agricultural sector represents a primary focus for rural development. Land use statistics for 1996 indicate that 65% or 172,128 acres of the City of Hamilton's total land mass of 265,803 acres were agriculture based.

Locally, Hamilton's rural communities contributed significantly to Ontario's overall agriculture production of $7.22 billion in 1999. Hamilton's farm cash receipts for that year reached $182.7 million.

The following table outlines the main commodities produced in the City of Hamilton.

Farm Cash Receipts in Hamilton by Main Commodities ($Millions)	
Floral & Nursery	55.2
Poultry	50.6
Vegetables	18.1
Dairy	11.6
Fruit	9.0
Soybeans	6.7
Other	31.5
Total	**$182.7 M**

Agriculture in Hamilton is a thriving and expanding industry that has developed into one of the most diverse in the province. The local agriculture industry has taken advantage of the area's soil resources, geographic position, unique microclimates and local market conditions to produce high quality and high value commodities for local consumers, processors and for export around the world.

Major Issues and Trends

The agriculture industry is today faced with the challenge of adapting to changes in marketplace globalization, technologies, input costs, pressures on agriculture land use, labour force shortages, value-added agriculture-related business, environmental and food safety standards, as well as societal standards and consumer expectations.

All of these challenges and trends will provide the foundation for decision-making in the City of Hamilton with respect to land use and infrastructure matters, economic plans in the agricultural industry, new business growth and the development of human resources programs. A trend towards public awareness of agriculture is emerging so that society can better understand the critical role that agriculture plays in sustaining and building a healthy rural community.

Conclusions

A significant portion of the land in the new City of Hamilton is agricultural. Looking to the future of this sector in Hamilton, there are many questions that must be addressed and issues that cross multiple industry sectors. Should the city preserve its existing agricultural lands and related uses? Should a portion of these lands be converted to

residential, commercial, or agricultural uses? What will these lands look like twenty years from now?

Agriculture is an important sector in the City of Hamilton that merits study; decisions made with respect to this sector will impact business, the environment, and the community. The proposed Agricultural Economic Impact and Development Study is the first step in setting a vision for the agricultural lands in Hamilton. It will serve as precursor to the work that must be undertaken by the Planning Department in respect of the urban boundary expansion and the decisions that are required for the future make-up of the city's industrial parks.

CLUSTER PLAN FOR AGRI-BUSINESS

Vision

Agriculture in the City of Hamilton is a thriving and expanding sector enhanced by the emergence of new technologies, societal standards, consumer expectations and value-added agriculture-related business.

Profile of Future Companies in the Cluster

It is anticipated that the agri-business cluster in Hamilton will continue to experience significant development of primary production for the following products and industries: floral, nursery, greenhouse, vegetable, dairy, equine, poultry and food processing with a spin-off to value-added agriculture-related business. Examples of value-added business developing throughout the Hamilton area include wineries, maple syrup producers and agri-tourism venues such as Puddicomb and Dyment Farms.

Economic Impact Study

The City of Hamilton's Economic Development Department and the Hamilton-Wentworth Federation of Agriculture (HWFA) are working co-operatively to commission an Agricultural Economic Impact and Development Study. A local steering committee has been formulated with members from the following organizations:

- HWFA
- Ontario Federation of Agriculture
- Human Resources Development Canada
- Ontario Ministry of Agriculture Food and Rural Affairs
- Hamilton-Wentworth Training Board
- City of Hamilton Economic Development Department

Request for Proposals have been sent to various consultants qualified to undertake and complete this study. The final study results and all related information will be completed by August 31, 2002 for review, recommendation and future implementation.

Short-term Deliverables (Less than 1 year):

The Agricultural Economic Impact and Development Study will:

- identify the economic impact that agriculture and agri-business have on the location and nature of agriculture within the City of Hamilton;
- describe the non-monetary benefits that agriculture provides the non-farm population (such as land conservation, land stewardship, wetland preservation, agri-tourism, etc.);
- identify labour market adjustment factors and changes to the composition of the labour market within the agriculture sector with respect to technology, economic, demographic and structural influences;
- document existing support and marketing initiatives provided by governments for the agriculture sector;
- recommend future directions/changes in the industry, including land needs, labour requirements and support mechanisms; and
- present actions required to ensure that agriculture has the opportunity to continue as a viable industry in the City of Hamilton.

Medium and Long Term Deliverables:

- to be identified in the Agricultural Economic Impact and Development Study.

Aerotropolis (development surrounding the Airport)

Emerging Cluster

Introduction

The John C. Munro Hamilton International Airport is one of the most important economic engines for the City of Hamilton. With the North American Free Trade Agreement (NAFTA), Free Trade Area of the Americas (FTAA), European Community and evolving Asia/Pacific Community, the Airport will be the future for employment and assessment growth as well as distribution development. The growth of other industry sectors in Hamilton is dependent on ready access to the airport and the servicing of lands for future development in the surrounding area.

INDUSTRY OVERVIEW

Transport Canada and the Federal Aviation Administration regulate the North American airport sector. Ownership of airports varies from public to private to public/private partnerships. Hamilton International Airport is owned by the City of Hamilton and operated by Tradeport International Corporation on behalf of the City.

In a global context, the John C. Munro Hamilton International Airport has the potential to become one of the major airports in Ontario, distributing people and products throughout North America and overseas. Currently, the majority of activity is generated by the demand for transportation into and out of the Hamilton and surrounding area.

Other global centres are now focused on long-term strategies for their airports. For example, Dallas/Fort Worth - Alliance Airport has a 20-year plan to spend almost $5.5 billion, expanding its passenger, cargo and other facilities. Alliance includes an industrial airport, rail service, major highway connections, state-of-the-art infrastructure, full digital capability and land development opportunities. It is home to 17 Fortune 500 companies with sales totalling over $292 billion in 1998. This illustrates the importance of aerotropolis' as distribution centres for just-in-time goods and services.

The FTAA has the potential to create the world's largest free trade agreement area with 800 million people and combined gross domestic product of nearly $11 trillion U.S. Implementation is expected by December 2005 with 34 countries participating. Trade throughout the hemisphere would increase opportunities for exporters, manufacturers and consumers while increasing the need for distribution/transportation services.

Major Trends and Issues

In the last decade, the most successful companies have benefited from skilled labour, high-speed transportation, infrastructure, competitive market positions, and colleges/ universities to sustain and enhance their success. A global trend toward just-in-time delivery has had implications for companies who have had to adjust sales, inventory and manufacturing processes in order to gain a competitive edge. This has resulted in operational changes whereby parts are sourced internationally, inventories are minimized, and customer responses are fast and flexible. In order to reduce the time to market, companies are locating along major access corridors within 15 minutes of an airport.

How are airports responding to these changes in the global marketplace? "Aerotropolis" Master Planned communities are a fairly recent concept emerging around airports. Services in these communities include but are not limited to airport, major highways, rail, port connections, mass transit service, airport industrial development, commercial/office spin-off development, and residential areas with schools and retail/food services.

Another trend in the airport sector is the targeting of time-sensitive sector companies for distribution such as computer hardware, computer software, electronics, telecommunications equipment, apparel, automotive components for the auto industry, industrial equipment and health/biotechnology. Fort Worth/Alliance airport is a good example of Fortune 500 companies locating at airports.

Local Analysis

The John C. Munro Hamilton International Airport is located in the south end of Hamilton, approximately 70 km from the Pearson International Airport in Toronto. TradePort International Corporation operates the airport, under a 40-year public/private partnership agreement with the City of Hamilton. With no night flying restrictions and a 10,000-foot runway, the Hamilton Airport can support intercontinental traffic on a 24/7 operating basis. The airport has consequently become a hub for major cargo traffic.

People and cargo are attracted to the Hamilton area for personal and/or business reasons. Many business sectors benefit from airport activity such as healthcare, information communications technology, traditional manufacturing, tourism and distribution. During the Focus Group investigations, it became clear that the other economic sectors were very supportive of directing resources to the growth of the airport.

The airport also offers high productivity, no congestion, low cost airport services and access to road, rail and port. Transportation linkages such as air-to-road and rail-to-port are important factor for successful business activity in the Hamilton area. Planned expansions in transportation infrastructure, including the new Highway No. 6 (linking the

airport to the Highway 403) and the proposed mid-Peninsula corridor, will augment the attractiveness of the airport and establish new economic corridors for future development. When the Highway No. 6 extension is completed in 2004, approximately 3,700 acres of land could be opened up for development. However, zoning, official plan, urban boundary and servicing issues all need to be addressed before development can occur in this area.

SWOT Analysis for the Airport

Strengths	Weaknesses
▪ Public/private partnership has injected private sector dollars into airport infrastructure and marketing ▪ 24/7 Operations – no night flying restrictions, weather systems ▪ Location – in the hub of Canada/US industrial heartland - southern Ontario with access to people, business, border and Toronto ▪ In the Eastern Time Zone allows for same/next day deliveries. ▪ Infrastructure – 10,000 foot runway ▪ Projected increase in passenger growth	▪ Transportation links to major highways ▪ Land use and planning constraints (i.e. land not zoned for development) ▪ Unserviced land in the area surrounding the airport ▪ Outside the Urban Boundary

Opportunities	Threats
▪ Proposed Hwy No. 6 will create a new corridor for economic development, including hub & spoke distribution centres ▪ West Jet expansion ▪ HIA terminal expansion ▪ Airport can be used to support the growth in other industry sectors in the City of Hamilton ▪ Free Trade Zone will open door for international companies	▪ Growth of other airports such as Pickering, Niagara/Buffalo, Montreal ▪ Transport Canada has set aside lands in Pickering for future development

Best Practices

Staff investigated the following facilities to determine Hamilton's success in relation to other airports:

- NFTA – Niagara Frontier Transportation Authority – Buffalo/Niagara Falls International Airports
- Dallas/Ft.Worth/Alliance International Airports
- Lambert/St. Louis International Airport
- Development Authority of Bulloch County Georgia - Statesboro Municipal/Savannah International/Hartsfield International Airport
- Port Columbus/Ohio - Rickenbacher/Cleveland International Airports
- Raleigh-Durham/Charlotte-Douglas/Wilmington/Rocky Mount-Wilson/Piedmont Triad International Airports
- Oshawa Municipal/Lester B. Pearson (Toronto) International Airports/Pickering Lands Development
- Aeroports de Montreal - Dorval/Mirabel International Airports
- Calgary International Airport
- Knock International Airport - Ireland

Key Research Findings

Around the world, there exists a common theme of organizing a "transportation network engine" to enhance the economic opportunities for communities with airports. Most have Master Plans with linkages of air to land to port.

"Aerotropolis" master planned communities are emerging around airports. Services include but are not limited to airport, major highways, rail, port connections, mass transit service, airport industrial development, commercial/spin-off development and residential areas with schools, retail, food services.

Airport lands offer Internet access, sanitary, water natural gas, electrical, phone and cable services.

Airports are targeting time sensitive companies for distribution such as computer hardware/software, electronics, telecommunications equipment, apparel, automotive components, industrial equipment and healthcare/biotechnology products.

All are retaining and expanding business while investing millions to ensure that their communities benefit from this economic engine's results.

Focus Group – Key Findings

A focus group, comprised of a broad range of interested parties in the airport sector including Tradeport International Corporation, multinational courier companies, airport

consultants, manufacturers and small airlines, was established to discuss issues relating to the development of the Hamilton airport and the surrounding area.

Key conclusions/recommendations from the group are as follows:

- the vision is to be Canada's premier specialty cargo airport and Ontario's third passenger gateway airport;
- the top priority is to maintain 24/7 competitive advantage;
- the key obstacle is the lack of infrastructure and access roads;
- there is a need to rebrand Hamilton as a tourism destination;
- land around the airport needs to be serviced/zoned; and
- investment in navigational aids is recommended.

Why is the Airport the number one priority?

- Air cargo/courier/passenger services are growing industries
- Rates for shipping products are decreasing
- Variety of products being shipped are increasing
- New air routes are emerging
- NAFTA, FTAA, European Community, Asia/Pacific Community encouraging greater movement of a wide variety of goods globally
- Hamilton International Airport has a runway to handle intercontinental traffic, no congestion, high productivity, 24 hour operations, low cast airport services, access to road, rail and port, & 68,400,000 in public and private investment to date, Foreign Trade Zone opportunity, strategic location in the centre of Canada's Industrial Heartland and proximity to major U.S. markets
- Provincial Government has committed $33 million to build the New Hwy #6 with direct access to the Airport
- Planning is underway for the Mid-Peninsula corridor which will enhance the Canada/US transportation routes and create another QEW in terms of economic development

Conclusion

Support for the development of the Hamilton airport comes not only from the airport sector, but also from every one of the other industry sectors examined. The airport is clearly an economic engine for the City of Hamilton and will support the growth of the other sectors. With Hamilton's shortage of serviced industrial land in close proximity to major highways, the airport becomes the obvious location for future development.

The proposed Highway No. 6 extension presents an excellent window of opportunity to address Hamilton's industrial land issues; however, it is just a window. One must bear in mind that surrounding municipalities such as Brantford and Burlington are also working diligently to service their industrial lands and to speed the development process. Hamilton must act quickly to resolve zoning, official plan, and urban boundary issues around the airport. Only then can servicing take place.

In short, the airport is the number one strategic priority for economic development in Hamilton but may also require the most investment. There is a great deal of work to be done by various departments in order to achieve the objectives set out for this sector. Timely action in commencing this process is critical.

SECTOR PLAN FOR THE AEROTROPOLIS

Vision

To create an industrial, commercial and residential community around the Hamilton International Airport, that exists and grows in support of the airport's and the City's economic development objectives.

Profile of Future Companies in the Aerotropolis

The land adjacent to the proposed Highway 6 extension to the airport is essentially a blank sheet for development. In order to identify planning issues as well as transportation and servicing requirements for the area, staff needs to develop a snapshot of what types of companies are planned for the area - what sort of cluster development is intended. The cost to provide infrastructure to the area will be affected by these decisions and have long-lasting effects on the city. Is it in the city's best interest to zone the area for intensive manufacturing, for high-tech companies, or a research park? What are the implications?

As an example, the concept of an Innovation Park for the lands along the new Highway No. 6 has significant potential. In conjunction with McMaster University, the city could explore the establishment of such a park, to include research and development facilities, an incubator, a private sector anchor tenant, and so forth.

In order to assess the highest and best use of the lands surrounding the airport, it is recommended that a consultant be engaged, as soon as possible, to develop an Airport Development Feasibility and Industrial Profile for the lands within the future Highway No. 6 corridor.

Cluster Plan Objectives

1. Support the Airport sector's vision to become Canada's premier specialty cargo airport and Ontario's third passenger gateway airport.
2. Support Tradeport International Corporation's Master Plan.
3. Focus resources on the Airport sector to expedite the short-term deliverables in our "window of opportunity".

Short-term Deliverables:

- Dedicate an engineer for infrastructure planning and co-ordination;
- Maintain 24-hour/ 7-days/ week operation of the Airport;
- Complete the Airport Feasibility Study for the Airport District;
- Complete the Industrial Business Park Study;
- Develop an Airport Marketing Program in Conjunction with TradePort;
- Develop and implement an Airport Tourism Gateway Program for the Domestic/FIT market;
- Develop a Flight Path Protection Program; and
- Communicate the vision and plan to stakeholders and all levels of government.

Medium-term Deliverables

- Service the industrial land adjacent to the airport;
- Resolve planning issues around the Airport;
- Provide full HSR service to the Airport; and
- Develop and Implement an Airport Tourism Gateway Marketing Program for the Domestic/FIT/Corporate/Conventional Group Tour Market.

Long-term Deliverables:

- Provide serviced industrial land on Hwy No. 6 service roads;
- Develop a plan for roads/services along the expected Mid-Peninsula Corridor;
- Provide serviced industrial land on the Mid-Peninsula Corridor service roads;
- 24 X 7 mass transit system in place;
- Inter-modal transportation system in place - road, air, rail, port worldwide; and
- Develop and implement an Airport Tourism Program for the Domestic & International FIT/corporate/convention/group tour markets.

Health & Biotechnology

Emerging Cluster

Introduction

Biotechnology might best be described as a research tool that is used by many industry sectors. This report will focus on the application of biotechnology in the health sector, often referred to as the "biomedical" sector. The research conducted through the use of biotechnology supports the health sector by producing life saving drugs and vaccines, new tools for health surveillance and diagnosis, and solutions to current health issues. Hamilton is poised for growth in this sector because of its existing assets (including McMaster University, hospitals, research centres, and talented researchers) and because of the unique research being undertaken here. The city can help this sector achieve its innovative potential by influencing the business environment and by marketing its world-class strengths in the global marketplace.

INDUSTRY OVERVIEW

Definition

Biotechnology is a term meaning the use of scientific tools and techniques in research, development and manufacturing activities. It is the research side of industry sectors including agriculture, aquaculture, environment, and health. Essentially, biotechnology allows researchers to find the good traits in one organism and incorporate them in another to make new products or provide new methods of production. More advanced techniques involve genetic engineering in plants and animals.

Industry Structure

Canadians firms have a small but growing share of the global biotechnology market with 1999 sales of approximately $1.9 billion[5]. The Canadian biotechnology industry consists of approximately 300 companies, one quarter of which are publicly traded. Biotechnology firms are located in all the regions of Canada, with the highest number in Quebec, followed by Ontario and British Columbia.

Approximately 10,000 people are employed in the biotechnology sector in Canada, with 2,000 jobs unfilled. The majority of firms are small or medium sized. Seventy-two percent have 50 employees or less. The number of firms and size of the workforce for biotechnology is quite small, yet this industry feeds the significantly larger health sector that employs thousands.

[5] *BIOTECanada*

So why would municipalities target biotech companies? The benefits include high paying jobs for researchers and technical staff; spin-off companies which generate new employment and assessment growth; a high profile for the community that draws multi-national companies; and an industry that engages the brain power of the city's educational institutions.

Biotechnology in Canada - Key Industry Data by Sector, 1997				
	Companies %	*Biotech Sales %*	*R & D %*	*Exports %*
Health Care	**46**	**50**	**87**	**58**
Agriculture	22	23	5	21
Environment	11	3	1	1
Food Processing	7	21	2	18
Aquaculture	4	1	0	1
Bio-informatics	3	0	2	0
Other	7	2	3	1
Total:	**100**	**100**	**100**	**100**

Source: BIOTECanada, Canadian Biotechnology '98, Success from Excellence, 1999

Environmental Scan

In a global context, biotechnology is one of the world's fastest growing industries and this trend is expected to continue. It is estimated that growth in the United States will increase by 12% annually from 1999 - 2009. Exports of Canadian biotechnology products doubled between 1993 and 1997.[6]

The United States has the largest share of the world biotechnology market. Canada, Western Europe, Japan and Australia are also significant players in the market. Statistics Canada ranked Canada second behind the United States for number of core biotech companies.

The highest concentration of Canadian biotechnology clusters is in the health sector. Quebec, Ontario and British Columbia have particularly strong expertise in health care. One of Ontario's stated objectives is to be one of the three leading jurisdictions for health and biotechnology in North America.

[6] *Strategis*

Canadian Biotechnology Clusters

Agriculture	Aquaculture	Environment	Health	Industrial Processes
Guelph Saskatoon	Halifax St. John's	Montreal Toronto Vancouver	Halifax Quebec City Montreal Ottawa Toronto London Edmonton Vancouver	Vancouver

Source: Industry Canada

The major biomedical clusters in Ontario are located in Toronto, Ottawa and London. Common to all of these clusters is the existence of leading biomedical companies, strong universities that house medical schools, and many affiliated hospitals and research facilities. Each cluster has strengths in particular areas of the biomedical sector. Recent developments include the construction of biotechnology incubators in Ottawa and London, as well as the development of a commercialization centre for Toronto.

Kingston and Hamilton are viewed by the provincial government as emerging biomedical clusters. Like the existing Ontario clusters, they are home to world-class educational facilities, hospitals and research centres. While Hamilton and Kingston do not yet boast the multi-national companies that are found in Toronto, Ottawa and London, many companies are being "spun-off" from the research centres and universities, thus increasing the growth of biomedical clusters in these cities.

Major Trends and Issues

Industry Canada estimates that three quarters of world biotechnology demand will continue to be in the health sector, with most of the remaining demand for agri-food products.

In Canada, biotechnology has progressed from a research focus to one that includes commercialization with an emphasis on innovation, manufacturing, marketing and selling. The National Biotechnology Advisory Committee forecasts that by 2005, the Canadian biotechnology industry can increase current revenues by a factor of five, from $1 billion in 1997 to $5 billion.[7] This would position Canada as the number 3 global player in sales of biotech products.

Future trends indicate a linking of industry through enabling technology. For example, bio-informatics and health sectors are now being linked in order to analyze vast quantities of research generated by the health sector. Health and agriculture sectors will

[7] *Some Canadian Biotechnology Trends, R.D. Reichert, National Research Council of Canada*

be linked to address food scarcity and nutritional issues around the world. The convergence of biotechnology and health care may lead to more cost-effective technologies and approaches, thus easing the strain on Canada's health care system.

One of the challenges in biotechnology is the long development cycle, approximately 10 years. Attracting investors is difficult because of the resulting time it takes to generate sales. In an effort to encourage investment, provincial and federal levels of government are working to ensure the availability of qualified human resources, competitive policies on intellectual property protection and regulatory approvals, as well as sources of funding. Some of the government programs currently in place include the Canadian Innovation Fund, the Network Centres of Excellence, the Ontario Research & Development Challenge Fund, the Biotechnology Commercialization Centre Fund, the Ontario Innovation Trust, and the Ontario Research Performance Fund.

Industry Criteria

The US Council on Competitiveness has identified the elements of a successful biotechnology region to be:

- Quality of Life - need an attractive location to draw researchers and close geographic proximity to spur collaboration and innovation.
- Research Centres - facilities where exploration and collaboration is encouraged and where government funding is actively pursued.
- Research Universities - attract world-class talent.
- Pioneer Companies - that foster entrepreneurial management internally, with leadership committed to the community.
- Connective Organizations - strong, proactive leaders who understand the changing needs of the community and aggressively create linkages between distinct disciplines.
- Pro-Business Culture - that encourages public-private collaboration and encourages a culture of co-operation.

The above-noted factors were also recognized the Hamilton Health & Biotechnology Focus Group, as critical components necessary to propel the growth of this sector.

Local Analysis:

The health sector has a strong presence in Hamilton and is the city's largest employer. The city is home to internationally renowned research facilities and hospitals; McMaster University, one of Canada's most innovative research institutions; Mohawk College, which recently

opened the Mohawk/McMaster Institute of Applied Health Sciences; a highly skilled and educated workforce; and an excellent infrastructure to support the health sector.

Health and biotechnology knowledge generation in Hamilton is:

- World-class in its areas of current strength;
- developing world-class expertise in other areas;
- premised on the link between the "bench and the bedside"; and
- concentrated in two research institutes and the Faculty of Health Sciences at McMaster University University.

St. Joseph's Healthcare Hamilton	Hamilton Health Sciences Corporation	McMaster University Faculty of Health Sciences
Father Sean O'Sullivan Research Centre • Firestone Institute for Respiratory Health • Centre for the Evaluation of Medicine • Centre for Minimal Access Surgery • Brain Body Institute • Hamilton Institute for Urology	Henderson Research Centre – programs in: • Experimental Thrombosis and Atherosclerosis • Clinical Trials Methodology • Preventive Cardiology and Therapeutics • Clinical Thromboembolism	Centre for Molecular Medicine and Health • Antimicrobial Research Centre • Centre for Gene Therapeutics • High Throughput Screening Facility

SWOT Analysis for the Health & Biotechnology Sector

In reviewing the industry criteria for the biotechnology sector, and the elements common to the existing biomedical clusters, it is clear that Hamilton has the requisite physical infrastructure and the human resources needed to prosper. The challenge for the city is to create an environment that supports the commercialization of research and encourages start-up companies to remain in the community. The city also has a role in working with community leaders to promote Hamilton's health and biotechnology expertise in the global marketplace.

Strengths	Weaknesses
▪ World-class research and development is being conducted in the city ▪ Health sector employs a large number of people ▪ Health sector provides the infrastructure (hospitals, university and research centres) that fosters biotechnology research	▪ The City of Hamilton is not recognized at provincial, federal and international levels as a cluster for health & biotech research ▪ University technology transfer policies require more innovative approaches to foster growth of spin-off companies ▪ Institutions, research centres, and companies not maximizing the benefits of collaboration

Opportunities	Threats
▪ Increase the awareness of the Hamilton Health & Biotech sector at provincial, federal and international levels ▪ Attract companies, researchers, investment, government funding, and partnerships with multi-nationals	▪ Time - outpaced by others as competition increases in the race to commercialization ▪ More progressive technology transfer policies in other municipalities

Focus Group

In June 2001, the Economic Development Department hosted a focus group session regarding the development of the health and biotechnology sector in Hamilton. The focus group included representation from the university, hospitals, research centres, regulatory affairs, as well as small and medium companies. There was a great deal of enthusiasm and support for moving forward with initiatives in this sector and participation from the city was encouraged.

The following key recommendations from the focus group outline short-term priorities for action:

- create an inventory and profile for the health & biotechnology sector in Hamilton;
- form a health & biotechnology council;
- investigate human resource issues to ensure a supply of talented researchers and skilled labour; and
- develop a marketing plan for the cluster.

Subsequent discussion identified the need for a biotechnology incubator to encourage the commercialization of research and to provide researchers access and proximity to scientific equipment and related support services. McMaster University has requested

to City of Hamilton partner on the development of a biotechnology incubator and to seek provincial funding for same.

Longer term recommendations included the expansion of joint ventures and alliances, creation of incentives for companies to stay or relocate to Hamilton, and ensuring competitive tax rates and availability of serviced land for development.

Conclusions

Hamilton is well positioned to advance the growth of a health and biotechnology cluster. In fact, the city is already in the emerging stages of this development and on-going research will continue to attract investment and skilled researchers to the community. However, the existing research is being conducted in isolation and there is no strategy in place to market the sector from a city perspective. As well, since the thrust for growth in this sector will come from within, through the development of spin-off companies, an incubator is a key consideration to be explored. Technology transfer policies should also be examined with a view to encouraging commercialization. In order to achieve its full innovative potential, a coordinated effort to support and promote the health and biotechnology sector, is imperative.

The City of Hamilton needs to become the catalyst for the health & biotechnology sector - bringing together industry leaders in the community; promoting the sector's unique research, products and services to the world; and supporting an environment that will encourage spin-off companies to remain in the city, attract other companies to locate here, and foster alliances with multi-nationals. As a critical mass is formed, the attractiveness of the city as a place in which to invest, to work, and to develop, will be enhanced.

CLUSTER PLAN FOR HEALTH & BIOTECHNOLOGY

Vision

To increase the economic prosperity and employment in Hamilton by transforming the city from an emerging biomedical cluster to a centre of excellence, which is recognized around the world.

Profile of Future Companies in the Health & Biotechnology Cluster

A snapshot of the types of companies that are expected to emerge in the health and biotechnology sector include small research and manufacturing companies that spin-off from the research centres and McMaster University; pharmaceutical companies; as well as laboratories that conduct research and clinical trials. This development will in turn spur the need for venture capital firms and associated services.

Cluster Objectives

It is essential that the community leaders in this sector come together with the city to jointly plan a strategy for development. In order to compete globally, Hamilton must distinguish itself from its competition by spotlighting the unique research being undertaken and package it with the abundance of research & educational, facilities, human resources, and quality of life aspects.

The role of municipal government, as defined by focus group participants is to work together with sector stakeholders building synergy, providing leadership, leveraging opportunities and marketing Hamilton's assets. Working together, this community can achieve its goal of increased economic prosperity.

Short-term Deliverables:

- Develop a Health & Biotechnology Profile & Inventory: The Health & Biotechnology Profile will position Hamilton as an emerging centre of excellence by presenting the sector's current strengths, quality of life indicators and "strategic stories" that will illustrate the potential of the city. It will also include a directory of public and private sector organizations currently engaged in biomedical research and development. Funding for this project has already been secured through the Economic Development Department, the federal Program for Export Market Development (PEMD-I) and McMaster University.

- Conduct Feasibility Study for Biotechnology Incubator: McMaster University has approached the City to partner on the development of an biotechnology incubator that would help encourage commercialization of research and develop innovative partnerships with private industry. The facility would provide access and proximity to leading edge research and scientific equipment, support services and business plan assistance, as well as access to international research and business networks.

- Establish a Biotech Council: The need for a biotech council was voiced through the health and biotechnology focus group. The council would be involved in strategic planning, marketing, networking and educational activities. It would be the community voice for biotech issues, and have input at all levels of government.

- Develop a Marketing Plan: Marketing the combined resources and services of Hamilton's biomedical sector will demonstrate the city's emerging centre of excellence.

Medium-term Deliverables:

- Create an environment that will encourage existing and start-up companies to stay in the city and other companies to relocate to Hamilton.

- Investigate the feasibility of a biotechnology accelerator. This type of facility would be a second stage support environment for start-up companies and provide a home to companies "graduating" from the biotechnology incubator.

- Explore the feasibility of an "Innovation Park" or "Discovery District" for Health & Biotechnology R&D. In conjunction with development of an accelerator, this concept envisions the zoning of a dedicated area in which health and biotechnology companies as well as related support services would cluster.

Long-term Deliverables:

- Ensure the availability of serviced land for new development.

Information & Communications Technology

Emerging Cluster

Definition & Introduction:

Information technology refers to the collection of products and services that turn data into useful, meaningful, accessible information. There are several major facets of Information Technology: computer hardware, software and services. Often, telecommunications hardware, software and services are also included in the definition. Given the convergence of Information Technology with Communications Technology, including the Internet, hand held devices, intelligent machines and other equipment, information and communications technology has been merged into one sector.

ICT, as a group of products and services, is an enabler for other industries and consumers to function more efficiently. It intermingles with other identifiable industries. Hamilton's economy, which is dominated by Steel/Manufacturing, Medical Services and Government, is a perfect example of this. Each of these sectors has been a large consumer of technology as a method of becoming more efficient and competitive. This very consumption of ICT naturally stirs the growth of the sector locally if stickhandled effectively.

Canadian/Global Context:

The ICT sector is experiencing consistently high growth rates. From a national perspective, the ICT sector has an annual growth rate of 11.5% since 1993 compared to the national growth rate of 3.5%. Employment in the ICT sector has also experienced a high rate of growth at 5.7% per year compared to a national average rate of 1.9%.[8]

At a municipal level in North America, there are existing, successful technology clusters and/or sectors that can be held up as examples of how these growth rates can be achieved: Silicon Valley in California, Raleigh Durham in North Carolina, Boston, Dallas and others in the United States. In Canada, Ottawa, Toronto and Kitchener Waterloo along with Calgary, Victoria, Kelowna, Fredericton are examples.

The benefits that are currently being derived from this burgeoning technology sector can be found in the Ottawa area. Ottawa high-tech firms:

- attracted $1.34 billion in venture capital in 2000,
- the high-tech sector's GDP grew 17.6% last year,
- Ottawa's residential vacancy rating is straining at .2% and the real estate market is equally as dramatic.

[8] *Strategis.ic.gc.ca/pics/it/sp1199e.pdf*

The Internet has had an enormous effect on globalization. Connectivity has accelerated growth in this regard. 'Old' industries are being pushed into a new manner of doing business. Small businesses must hop on to this fast moving technology train or they will not survive.

Major Trends and Issues:

Neither consumer nor industry is immune to the pace of change in the ICT sector. The new technologies are accompanied by a whole new vocabulary with terms like digital economy, B-Web, MP3, Gigabits, e-logistics, picoseconds, streaming videos, ultrawideband and so on.

Trends are often influenced by major world events. One of the major events affecting all industries is the conflict in Afghanistan and the threat of terrorism to North Americans. Spending on securities based products and technologies has surged.

In order for companies to compete in the global marketplace, they are demanding automation, electrical and process control and testing equipment, software and consulting, system integration, web-enabled applications, e-commerce tools, document management, telecommunications equipment, software and consulting. Most of these products are consumed by the medical sector, government and steel/manufacturing based companies.

Government Initiatives:

Both the federal and provincial governments are involved heavily in the ICT sector. The federal government organized the E-Business Opportunities Round Table in mid 1999 to develop a strategy for accelerating Canada's participation in the Internet economy. This is a voluntary, private sector led initiative with the government working as an equal partner in the process. The Round Table identified stumbling blocks to growth of Canada's ICT sector and made recommendations to spur growth in the ICT sector:

- Build Canada's International Brand
- Accelerate E-Business Adoption by SME's
- Become a Magnet for Talent
- Close the Venture Capital Gap
- Make Government on-line a driver of E-Business

On the provincial front, the Ministry of Energy, Science and Technology created a funding program entitled "Connect Ontario/GeoSmart Program" for the purpose of supporting community access to information technology and the Internet.

INDUSTRY CRITERIA

Quality of Life: What draws technology companies to Canadian communities? Technology companies are not bound by traditional criteria for site location. They do not need to be close to their 'market' since their market is often global and virtual in nature. One of the main ingredients in locational decisions is quality of life. Quality of life includes elements such as good education, low crime rates, access to quality housing, arts and culture, efficient transportation networks, parks & trail systems. Technology entrepreneurs choose their company locations based on where they want to live.

Labour Force: Access to human capital or, a trained and ready work force with the 'brain power' that a tech company needs, is of utmost importance. Therefore, communities with major universities and research institutions are big targets.

Access to Capital: ICT companies need access to capital locally. In Toronto, for example, Brightspark Ventures is a private incubator that invests in companies and their technologies. Other sources of dollars include Business Development Bank of Canada (BDC), Roynat, Pension Funds, Working Ventures (Toronto) and venture capitalists. Banks are not philosophically geared towards lending to other than 'bricks and mortar' types of proposals.

Employee Needs: Workers in the software and computer services industry earned an average $55,974.00 in 2000, substantially higher than the national average.[9] *A* trained ICT workforce therefore has expectations of a salary level in excess of the national average. For a local economy, this higher salary level translates into more spending and a boost to the wealth of the community.

Local Sector

There are approximately 18,000 businesses in Hamilton with a small but rapidly growing percentage from the ICT sector. In terms of our labour force, most of the ICT jobs can be found in the top 100 companies and organizations in Hamilton such as Stelco, Dofasco, Hamilton Health Sciences Corporation and City of Hamilton.

There are, therefore, many opportunities to work within this sector in Hamilton. The city's educational institutions such as McMaster University, Mohawk College, Trios and CDI Colleges etc. offer excellent training grounds, yet, many of Hamilton's skilled workforce are travelling down the highway to Burlington, Oakville, Mississauga and Toronto for jobs in their field. Our future actions need to assist in reversing this commuter trend.

Many ICT associations operate in and around Hamilton, fulfilling a variety of needs for the residential and business populations. These associations are currently meeting

---

[9] *Strategis.ic.gc.ca/sc_mangb/ecomevnt/summary_files/engdoc/sld001.htm*

together under the umbrella of the newly formed Technology Coordinating Committee (TTCC). For example:

- Business Information Technology Network (BITNet) - IT industry association serving companies in Niagara, Hamilton and Halton communities
- Golden Horseshoe Venture Forum (GHVF) – a networking organization designed to link IT companies with sources of financing
- Hamilton Connects – a not-for-profit community organization which aims to enhance and expand Hamilton's community networks and partnerships
- Community Information Network - collects, maintains, provides access to and disseminates information on community and government services
- Hamilton Public Library – serves more than 260,000 people in 26 branches
- Hamilton Connects - organization which aims to enhance and expand the capacity of community networks, organizations and partnerships by providing a vital link to technology
- Hamilton DataShare - to promote and facilitate the sharing of useful data and information among a regional network of community groups, associations, organizations & agencies
- Public Information Centre (PIC) - community portal which has been developed to show how information technology (the Internet) can provide access to services and applications for everyone
- Hamilton-Wentworth Business Information Network (HWBIN) - an Internet gateway providing improved access to information for, and about, businesses in Hamilton
- Hamilton-Wentworth Information Network (HWIN) - to sustain and expand the regional not-for-profit telecommunications and technical infrastructure
- Hamilton-Wentworth Community Network - volunteer-driven, globally-connected, community-based, electronic information service
- Intermedium - not-for-profit member-based association whose mandate is to build a focal point for technology businesses
- Chamber of Commerce Science and Technology Committee - to ensure that local commerce & government/education & training agencies remain technologically up to date to maximize the competitiveness of local business within the new economy

There are so many organizations in and around Hamilton that support should be given to the formation of an umbrella organization to tie them together. The form that this umbrella organization takes will become clear as the strategy is implemented.

Local Providers of Telecommunications Infrastructure:

Companies such as Fibrewired Hamilton, Bell Canada, AT&T Canada, Group Telecom and Telus/Cable companies - Cogeco, Mountain Cable and Southmount Cable - have actually laid their own infrastructure in the City of Hamilton. Others are present but 'co-locate' with Bell Canada and use Bell Canada infrastructure.

Although Hamilton is almost 'overwired' with all of these providers, there are many pockets within the residential and business community that do not have access to high-

speed connectivity. In this regard, Bell Canada announced last year that they would fast track their high speed internet access service to residential and business customers in Canada by spending $1.5 Billion on connectivity. Solutions may also come from service providers such as Juch-tech, a local satellite company which creates wireless/satellite solutions for access to internet and point to point customer needs.

Hamilton's Technology Profile:

The Hamilton office of HRDC estimates the number of companies in the High-tech and Knowledge-based sectors as just under 1000. These companies, although primarily small (i.e. 1 – 19 employees) represent an employment base of 3000 employees. These figures do not include 'High Tech' in the 'old economy' companies such as Stelco, Dofasco and other large technology users. Companies such as these, employ hundreds of workers in technology based jobs.

Another large user of technology and technology workers is the call centre industry. The City of Hamilton is home to approximately 25 call centres ranging is size from 5 employees to 350 employees. Total numbers employed in the Call Centre industry in Hamilton are estimated at approximately 2000 people.

Hamilton's IT sector was virtually invisible until the City of Hamilton hosted an Wired Summit in 2000 to lure these businesses out and link them together. The Wired Summit spurred a great deal of conversation and initial networking.

The momentum created by the Wired Summit spurred a number of activities including the First Tuesday Networking Event and an application to the Province of Ontario for funding assistance and the creation of an association for ICT companies in Hamilton called Intermedium. The vision of Intermedium is to build a focal point for technology businesses, stimulating a climate of growth and prosperity in the community.

The allocation ($50,000) from the Provincial Prosperity Demonstration Fund (PDF) includes two basic priorities:

- To create a physical location for high tech company start ups downtown
- To assist local companies to 'find work' whether local, national or international

Educational Strengths:

McMaster University
McMaster University is the First University in Canada to offer a Computer Science & Software Engineering Degree.

McMaster's E-Commerce Research Centre (MERC) - is devoted to e-commerce research to build a world class research centre to help link research and educational activities in e-commerce in the graduate, undergraduate and executive development communities.

Management of Innovation and New Technology (MINT) Research Centre - mission is to:

- achieve and maintain pre-eminence as the world's foremost think tank in the field of innovation research
- provide a full-service consulting practice and clearing house for organizations who are interested in improving (or maintaining) their ability to be innovative
- establish an environment that will nurture a cadre of business leaders who can identify innovation-related issues and problem solve in an environment characterized by ongoing technological change

Information Technology Building (ITB) – In December 2001, McMaster officially opened the doors of the new Information Technology Building which is designed to allow for expanded educational and research activities in information technology, optoelectronics, communication technologies and software engineering.

Mohawk College of Applied Arts and Technology
Mohawk College of Applied Arts and Technology offers a wide variety of Business, Business Management, New Media, Network Security and E-Commerce programs on a full and part time basis.

X-Centre – Mohawk College created the X-Centre as part of their desire to assume a more progressive role in the knowledge industry. The X-Centre will facilitate a "learning centered" environment where students and faculty work together to foster and achieve excellence in their quest for knowledge and innovation.

SWOT Analysis of the ICT Cluster

Strengths

- Excellent telecommunications infrastructure with excess capacity.
- Strong community support for ICT - Intermedium membership.
- Access to a large labour force within and around Hamilton (estimated at 750,000 people).
- Proximal to the big market of Toronto.
- Excellent education institutions i.e. McMaster, Mohawk and specialty schools
- Excellent quality of life including education, green space and natural areas, access to Toronto, affordable cost of living.
- Strong community leaders in industry and health care: $2 Billion health care industry
- Existing ICT companies have strong technology skills
- Many IT and network community groups interested in ICT

Weaknesses

- Perception of Hamilton as industrial and therefore not technology capable.
- National/Provincial perception that ICT clusters only occur in Toronto, Ottawa, Vancouver, Kitchener-Waterloo etc.
- No anchor ICT companies.
- Hamilton's labour pool commutes to Toronto.
- Lack of sophistication among local businesses and consumers.
- Local ICT companies do not have Hamilton based clients.
- Lack of 100% availability of high speed internet access throughout the city.
- Local financing not available through VC's or Banks.
- Existing ICT companies have poor management and marketing skills for the purpose of expanding beyond 1-5 person operations.

Opportunities

- Starting at 'ground zero' and only one way to go!
- Expanding ICT users in Hamilton including Industrial/Manufacturing, Medical/Hospital, Government, Consumers, Office/Call Centres etc. creates local market demand.
- Reducing the number of our skilled labour force who currently commute to Toronto area.
- Local ICT companies can increase client base locally.

Threats

- Competition from neighbouring communities.
- Lack of downtown growth will stifle this sector growth.

Focus Group

The Economic Development Department engaged the services of a consultant to undertake a public consultation process for all of the emerging sectors including Information and Communications Technology (ICT). The ICT Focus Group key findings are summarized below:

City has to have a vision and state some goals - underpins everything

1. City commitment (political leadership) to recognize and build IT sector
2. Fund Economic Development Department as enabler / connector
3. Recognized umbrella organization in charge of formalized networking to promote collaboration
4. Existing strengths inventoried
5. Marketing/communications plan
6. Some way of measuring progress (community benchmarking)

Additional priorities were also identified including the revitalization of the downtown core, branding of Hamilton, creating more partnerships with McMaster University and so on.

Intermedium members cannot meet all of the identified goals on their own. Leadership and partnership with the City of Hamilton is essential to achieve many of these goals.

Conclusions

Hamilton has an excellent quality of life, strong educational institutions, many high tech users and a skilled labour force. The challenges and opportunities include promoting these strengths both internally and externally in a manner that benefits our local businesses and citizens.

It is clear from the Focus Group discussions and recommendations the ICT sector wants City Council to think differently about Hamilton and the 'digital economy' and to recognize it's importance in supporting other sectors in the city.

CLUSTER PLAN FOR INFORMATION AND COMMUNICATIONS TECHNOLOGY

Vision:

The ICT cluster vision is the same as the vision statement adopted by Intermedium: *To build a focal point for technology businesses, stimulating a climate of growth and prosperity in the community.*

Profile of Future Companies in the Cluster:

The types of companies that are expected to emerge from implementation of this vision include small to medium sized firms specializing in production control, document management, manufacturing processes and monitoring.

Cluster Objectives:

Based on the Industry Criteria, the local SWOT analysis and the Focus Group findings, a 'Cluster Plan' for ICT has been created. The identified objectives fit with the Federal Government/Industry Round Table recommendations.

Today, economic growth is driven by knowledge, skills, innovation and entrepreneurship. At the source of all of these attributes are people. This strategy recognizes people as the primary focus for economic growth from the vantage point of leadership and with regard to our labour force. Keeping this in mind, the objectives of the Sector Plan follow.

Short-term Deliverables:

- Identify sector champions from Municipal Council and Industry (Intermedium) to take a leadership role in developing the ICT sector;

- Develop an ICT sector Profile and Strategy with the following key components:
  - A comprehensive analysis of the local ICT sector
  - A Business Development Strategy with emphasis on a 'buy local' campaign
  - A 'benchmarking' study in order to provide for measurement in the future
  - Identification of synergies between ICT and Downtown Revitalization;

- Host a Wired Summit II as a means to bring key stakeholders together to create synergies and hear their ideas;

- Develop a communications/marketing strategy in cooperation with Intermedium. This project includes the upgrading of the Intermedium web site to allow for a technology based approach to this communications plan; and

- Create a mechanism to find local venture capital and to funnel it to targeted and 'ready' companies in cooperation with GHVF.

Medium-term Deliverables:

- Implement the communications/marketing plan.

Film

Emerging Cluster

Industry Overview

Filmed entertainment production has been a vital industry in Canada since the early 1980's. Canada emerged as a low cost production centre for U.S. based film projects. Hollywood found a trained and educated work force in Canada that worked at considerably lower rates than U.S. counterparts.

The film production sector has grown faster than the Canadian economy, growing at an annual rate of 9.3% since 1993. Filmed entertainment production primarily consists of foreign and domestic projects *(TV Series, TV Movies, Mini-series, Specials, Pilots, Docudramas, Feature Films, Animation, Music Video and Commercials)*. Ontario, British Columbia and Quebec represent the major Canadian production centres.

Over the last 20 years Ontario has grown from being a regional production centre to competing on a global basis. Ontario's affiliated labour force has also grown both technically and numerically; globally considered to be both highly skilled and trained in filmed entertainment production. The value of production in Ontario has grown from $218 million in 1990 to $1.02 billion in the year 2000, signifying the impact this sector has on the economy. Canada and the province of Ontario have targeted the production of filmed entertainment as a part of their economic development strategy. On a federal, provincial and local level, private investment and public policy initiatives have served to maintain the strength of the industry. In the past few years, public policy initiatives have been particularly dynamic in their efforts to spur the growth of film production in the country. However, Canada and Ontario are clearly not the only economies to target the production of filmed entertainment. The rest of the industrialized world is entering into the market and have become effective competitors for global production.

Canada and particularly Ontario cannot expect to retain their strong position in the industry based on current conditions alone. Ontario's strategic goal should not be directed to maintaining the status quo, but proactively moving toward avenues to enhance the Province's competitiveness in North American and world markets over the long term. The industry in Ontario is both large and continues to grow at a rapid pace; therefore implying that this is an appropriate time to plan for continuation of expansion by moving into new regional centres and markets.

Local Analysis:

The City of Hamilton is an ideally situated community for the expansion and development of a regional production centre in Ontario.

In 1999 and 2000, Hamilton experienced the highest volume of filming for an Ontario community outside of the core Toronto film district. Hamilton participated in 34 productions or 17% of the total filming activity in Ontario in 1999. Production activity in the following year saw Hamilton host 40 productions with a total of 285 shoot days. Location filming in Hamilton increased by 21% over 1999 and has consistently risen at that rate annually for the past three years.

Examples of the economic impact and direct spending into the Hamilton economy associated with film production include the 2000 feature film "Exit Wounds". This film shot for six days in downtown Hamilton with an estimated minimum of $250,000 paid directly to the local business community. A General Motors commercial filming for three days in Hamilton estimates direct spending of $50,000.

Efforts of the City of Hamilton, Hamilton Film Liaison Office and various municipal departments have been recognized throughout the filmed entertainment production industry for their level of service and film friendly community. Annually, funds are raised within the production industry to thank centres for their outstanding contribution to location filming. Hamilton has been awarded for its efforts in both 1999 and 2000. Local charities received cash donations through the "Thank You Ontario, Thank You Toronto Campaign".

In 1999, Hamilton municipal government established a full-time Hamilton Film Liaison Office (HFLO). The goal of the HFLO has been to increase film activity through increased marketing efforts and to offer unparalleled service to this sector. In order to attain international recognition and networking opportunities Hamilton obtained full-membership in the Association of Film Commissioners International.

SWOT Analysis for Film

Strengths	Weaknesses
▪ Location & proximity to Toronto ▪ Film friendly community ▪ Level of Service ▪ Location Diversity ▪ Alternative to Toronto's filming gridlock ▪ Lower Cost Alternative ▪ Local Government support of film activity and production industry	▪ Outside Union Production Zone ▪ Lack of Infrastructure ▪ Lack of Industry labour force located in City of Hamilton ▪ Need for educational and training programs in City ▪ Multi-media resource to support industry (Digital Library and Web Site ▪ Limited film commission resources (staff & funding)

Opportunities	Threats
▪ Hamilton can become a regional centre for film and television production (location and diversity) ▪ Development of a recognized Hamilton Film Commission as an industry focal point ▪ Federal funding potentially available ▪ Local Infrastructure, labour force and training development	▪ Over indulgence of film activity within the community that can adversely affect the business and residential community

Conclusions

The City of Hamilton is in an excellent position to take advantage of growth in the motion picture and television industry in Canada and particularly Ontario. The Hamilton Film Liaison Office is leading the initiative to attract this type of business to the area, working co-operatively with the Ontario Media Development Corporation and the Toronto Film Office.

CLUSTER PLAN FOR FILM

Vision:

To become a major regional centre for production in Ontario, supporting Canada's robust production industry.

Cluster Objectives:

The Hamilton Film Liaison Office, will vigorously build, support and market the "Filmed Entertainment Production Industry" in the City of Hamilton. This collaborative initiative will connect municipal, provincial and federal governments with local private sector entrepreneurs to spur and develop this sector in Hamilton and the surrounding area through the creation of a "Film Commission".

Short-term Deliverables:

- Establish a Hamilton Film Commission - including a full-time office to provide a focal point for industry development. The goal of the Film Commission will be to attract new industry activity, market the community to the film industry, market local workers, and promote the creation of local training programs for individuals seeking to enter the industry.

- Develop marketing and communication tools - including a digital library, web site, data base, and advertising.

- Establish a Volunteer Committee

Medium-term Deliverables:

- Develop local training and educational training programs for industry

- Develop incentive programs for production to locate in Hamilton

- Incorporate a Regional Production Centre into part of the union production zone

- Provide local infrastructure - studio and sound stage with production houses

Long-term Deliverables:

- Ensure adequate supply of highly skilled and trained labour force

- Regional Production Centre competing on a global level

- Professional Media Production Community

Downtown Hamilton

Building on Legacies and Planning for Futures

Introduction

The health of the downtown is vitally important to the identity that the City as a whole draws from the area. Enhancing this identity will serve to create a more vibrant community and ultimately a better downtown.

A five-point plan has been developed, which strategically identifies key opportunities for redevelopment within the downtown and addresses the major issues that currently affect the area. This report also proposes specific short and long-term initiatives that merit investigation for the downtown.

A Five Point Plan:

1. Downtown Hamilton Secondary Plan
2. Infrastructure and Capital Investments
3. Communication Strategy
4. Incentive Programs
5. Environment

1. Implementation of the Downtown Hamilton Secondary Plan

The Hamilton Downtown Secondary Plan represents a formal plan for the Core, forming part of the Official Plan for the City of Hamilton. Designed to foster a dynamic mix of urban residential, commercial and institutional activities across the Downtown, the Plan is a map to follow in relation to the implementation of a land use vision for the Downtown.

The Secondary Plan has two important functions. First, it presents the community's vision for the future of the downtown to guide public and private decision-making. Second, the plan indicates what the City's priorities will be for publicly funded initiatives within the Downtown. In effect, the Plan serves as a reinvestment strategy that will assist Council and the Administration in preparing annual budgets and improvement programs.

The Secondary Plan represents a departure from a traditional approach to plans. To ensure a consistent approach to Downtown revitalization, the following six principles were established so that initiatives and proposals could be effectively measured:

- Use public realm improvements as the catalyst for revitalization;

- Strengthen the connectivity between neighborhoods, the Waterfront, Escarpment and other surrounding attractions and features;
- Make downtown living attractive;
- Build on existing strengths;
- Recognize the value of modest improvements and changes;
- Pursue a limited number of carefully designed and executed major projects.

Thematically, the Secondary Plan policies are grouped into five areas:

- Respecting design and heritage;
- Carving out a distinct economic role;
- Creating quality residential neighborhoods;
- Enhancing Streets and public spaces;
- Establishing a new system for planning approvals.

2. Prioritizing Infrastructure and Capital Investments in the Downtown

Continuous improvement of existing urban infrastructure, and planning to accommodate future infrastructure must be carried out in concert with the implementation of the Downtown Hamilton Secondary Plan. Major capital investments within the Downtown need to be considered in the context of the Secondary Plan with key consideration levied against issues of timing and community need.

3. Development and Implementation of a Communication Strategy

Communicating benefits to stakeholders, building strategic partnerships through education and information sharing, and facilitation of information requests represents an ongoing initiative as part of the development of a communication strategy for the Downtown. Opportunities within Downtown Hamilton to forge such partnerships with the Chamber of Commerce, the Downtown Partnership, the Home Builders Association, HABIA, ICI Realtors, stakeholders and interest groups alike need to be exhaustively explored.

The need to actively and purposefully promote the downtown as a viable commercial entity and to advocate it, as a people place, requires concerted effort and strategic planning to ensure success. A strategy gaining considerable support and bearing fruit from a municipal context is to establish a brand or ethic to associate with the downtown. Branding is more than the creation of a logo, or

the delivery of a snappy phrase. It is the embodiment of tangible and intangible ingredients aimed at enhancing the image and perceptions of place in a favourable way.

The need to brand the downtown however requires consideration and effective communication of broader corporate initiatives. The amalgamation of the City with surrounding municipalities also places a need to ensure that the brand does not serve to market, or position the downtown in such a way that it may disadvantage other areas of the City. Finding a complimentary role for the downtown relative to the economic and social role of the City as a whole is the challenge.

4. Delivery of Targeted Financial Incentive Programs to Assist Businesses and the Development Industry

The success of the downtown is contingent on a number of disparate issues being addressed systematically with a view of coordinating these efforts. Several financial incentive programs have evolved over time in relation to specific needs. It should be recognized that issues continually evolve, opportunities are regularly created and that the downtown as an entity is continually changing. Seizing opportunities to develop new programs for financial assistance, demonstrating a need or a requirement to provide financial assistance in innovative ways is critical for the success of many redevelopment initiatives.

Many initiatives contemplated by the implementation of the Secondary Plan target issues relating to the development of additional residential units, opportunities for development of vacant sites within the downtown, commercial façade improvements and the waiving of planning fees as part of the incentive process. Each program targets a specific set of needs. Care however must be given to ensure that such programs are complementary and are not exclusive of the benefits proposed by other programs. Waiving parkland dedication fees for example under the Open For Business Program may not serve the interests of developing additional recreational and parkspace within the downtown.

Currently, the Downtown Renewal Division administers the following programs which target specific needs within the downtown, and in some cases relate also to broader areas:

Hamilton Downtown Residential Loan Program

The Downtown Residential Loan Program was developed with the intent of providing financial incentive to developers in assisting with the costs of converting commercial space in commercial buildings into apartments, or renovations to bring existing apartments into compliance with the Property Standards By-law and Fire Code. Under the terms of the program, loans are interest free for a maximum of ten years. The principal is repayable over 120 months, in equal payments, upon completion of the project. The loan is calculated on the basis of $20 per square foot of habitable floor space.

Commercial Property Improvement Grant Program

The Commercial Property Improvement Grant Program is designed to provide financial assistance to commercial property owners and owner-authorized tenants within the existing 11 City wide Business Improvement Areas. Currently there are three Business Improvement Areas located within the Downtown. The program provides financial assistance through annual grants, for the improvement of facades and entrance features of numerous commercial properties.

Municipal Realty Tax Incentive Grant Program

The Municipal realty Tax Incentive Grant Program is specifically designed to provide an economic catalyst for Hamilton's Downtown. Under the plan known as the Enterprise Zone, tax rebates are made available for developing, re-developing or renovating residential/commercial lands and buildings located within the boundaries of the International Village and Downtown Hamilton Business Improvement Areas (BIAs).

For each rebate application approved, the program will authorize a nine-year rebate, in an amount not exceeding the increase in municipal realty taxes as a direct result of the development/redevelopment of the land and/or building. Approved rebates will not exceed 100 percent of the increase in the first five years, 80 percent in year six, 60 percent in year seven, 40 percent in year eight, and 20 percent in year nine.
The Enterprise Zone is intended to be a pilot/test area for this community improvement initiative. The success of the project will be evaluated within a defined time period with the potential for the program to be expanded to other parts of the Downtown, given appropriate Council and Provincial approvals.

Open For Business Program

The Open for Business Program represents an effort to encourage residential and commercial development and redevelopment activity within the Downtown area. Under the terms of the program, the City will refund the application fees for various Planning applications and waive development charges for any projects within the area identified as the downtown.

5. Creating the Ideal Environment

The major foundation of which the Downtown Hamilton Secondary Plan was developed, "Putting People First", embodies many of the issues and concerns which need to be addressed as part of a comprehensive strategy to revitalize the downtown. Economically, socially and perceptually, amenities need to be created to attract, and ultimately maintain interest within the downtown as a people friendly place.

Enhancing the physical environment can be as easy as implementing streetscape improvements, developing or assisting in the preparation of master planning

exercises for specific areas, or assisting the development industry in the preservation of heritage and architectural elements.

The social environment has in the past played a vital role in the success of the downtown as a place for social gathering. Past programming for events and downtown related festivals have been well attended and extremely successful. Opportunities to build upon these successes need to be identified if the downtown is to regain its prominence as a place of social gathering. The City should take the lead and maintain a healthy portfolio of events within the Core. Creating an opportunity to visit the downtown for an event compliments and supports the initiatives of creating a healthy and economically viable downtown. Private initiatives as led by the Business Improvement Areas, or other associations can only serve to augment the publicly programmed events within the downtown.

On a perceptual level, creating a downtown which is safe, perceived as safe, and is a comfortable environment is a much more difficult undertaking. The City of Hamilton has recently committed to developing a strategy to improve and enhance public safety within the downtown. Identifying factors, which contribute to a sense of safety need to be identified, and a detailed set of actions regarding these issues needs to be implemented. Safety cannot be purchased or implemented, it is the by product which follows a series of actions and events that people embrace. Safety needs to be fostered and nurtured much in the same way that many issues in the downtown need to be addressed.

Determining what is acceptable from a safety point of view needs to be a public process. Public consultation, involvement and the coordination of numerous stakeholders relative to this issue is a critical concern. Concerted and continuous effort to continually refine such issues is required as a mainstay within a strategy to revitalize the downtown.

Short Term Strategies

- Construct gateway signage at the major access points to the downtown; i.e., York St., Main St., and Burlington St.
- Erect wayfinding signage, being effective signage to help motorists and visitors find their way downtown
- Implement a program of Downtown events
- Investigate market opportunities such as commercial merchandising operations, including Factory Outlet Stores

Long Term Strategies

- Housing – target specific areas in the downtown that would be catalysts for revitalization, including: McMaster Housing Project in the south end of the core; Amity block on Ferguson; and, housing at King & Bay.

- Build Parking/Housing Structures – to alleviate surface parking lots and reinforce revitalization in strategic locations. For example: In proximity to the Police Station (multiple users in the area) and the King/Bay District.

Brownfield Redevelopment

Economic Development Tool

Overview

Definition of Brownfields

"Brownfields" are defined as abandoned, idled or underused industrial or commercial properties where expansion or redevelopment is complicated by real or perceived environmental contamination, building deterioration/obsolescence, and/or inadequate infrastructure. The City of Hamilton is one of the oldest and most heavily industrialized cities in Canada. The physical legacy of this rich industrial heritage includes a large number of brownfield sites in Hamilton's older industrial areas, known as the Bayfront and West Hamilton industrial areas. Preliminary work on a database of industrial redevelopment properties indicates that there are at least 150 to 200 such properties in Hamilton's older industrial areas.

The redevelopment of brownfield sites both in Hamilton's older Bayfront Industrial Area, and across the City, represents an opportunity to accommodate some of the land demand for industrial, manufacturing, and port related uses. Due to their need for port access, heavy industrial zoning and outside storage requirements, heavy industrial and port-related uses seek locations in the Bayfront Industrial Area. As well, interest in brownfield sites from other sectors, such as health and bio-technology, information communications technology, and film, is starting to emerge. This demand can be met through the redevelopment of brownfield sites both in the older industrial area, as well as the downtown, and across the City.

Promoting Brownfield Redevelopment

All levels of government in Canada have only recently begun to turn their attention to the promotion of brownfield redevelopment. In contrast, all levels of government in the U.S. have been involved in brownfield redevelopment for several years now. In terms of legislative and financial tools to promote brownfield redevelopment, Canada is between 10 and 15 years behind the U.S. The brownfield market in Canada is really still in its infancy. Based on experience in the U.S., this is a market, which will continue to grow and will play a prominent role for many years to come, locally, provincially and nationally.

One of the overarching conclusions of research into brownfields is that most brownfields require some form of financial incentive in order to be economically viable[10]. Numerous U.S. municipalities have brownfield incentive or promotion programs. Some municipalities in Canada, including Hamilton, have now begun taking a leadership role

[10] *S. Arella, 1999*

in providing incentives to encourage the private sector to undertake brownfield development.

New brownfield legislation (Bill 56) was recently passed by the Province of Ontario. Bill 56 will take effect once the Province has developed the accompanying regulations (Spring 2002). This legislation provides municipalities in Ontario with greater powers to offer financial incentives in the form of tax abatement and tax cancellation and greater powers to take control of abandoned brownfield sites. Those municipalities who most quickly and effectively implement the tools provided by the new legislation will benefit most from it and capture the largest share of the brownfield redevelopment market.

Major Trends and Issues

A recent study of over 100 brownfield projects in the U.S. found that industrial development remains the most common form of brownfield site reuse, with 43% of the surveyed brownfield projects being industrial reuse projects (CUED, 2000). For all non-residential uses, industrial development is twice as likely to occur as commercial development. Manufacturing, processing and light industrial uses are popular reuse options for brownfields. This trend makes sense as many brownfield sites are located in industrial areas, so industrial uses are a natural fit. Also, the average clean-up cost for industrial uses is significantly less than that for other types of development making industrial reuse an attractive option.

Other relevant brownfield trends:

- infrastructure costs represent a small percentage of total project costs if land use does not change;
- the business owner occupant is the most likely brownfield developer;
- local funds make up the largest pool of available financing sources; and,
- the public sector often plays a key role in land assembly.

Industry Criteria

The industry criteria for uses and companies seeking brownfield sites varies depending on the use. Industrial users will be more interested in transportation access, while non-traditional users may be more interested in a specific building, say a heritage building, or quality of life factors. But, the most common types of industries seeking brownfield sites in Hamilton are:

- steel and steel related;
- port related;
- heavy manufacturing;
- storage, warehousing and distribution; and,
- recycling.

All of these industry uses have several requirements in common:

- excellent transportation access to major highways;
- transshipment/transloading facilities;
- heavy industrial (K) zoning;
- significant separation distance from residential and other sensitive uses;
- forward and backward linkages with established companies; and,
- large tracts of land (10+ acres).

Experience has shown that start-up companies often require smaller sites (3-6 acres). Local company expansions, relocations, and established companies from outside Hamilton seeking new sites, usually require larger sites (10+ acres). Land fragmentation is a serious problem in the Bayfront Industrial Area, making it difficult to meet these land requirements. Therefore, the use of financial incentives along with the introduction of the new brownfield legislation and a more aggressive role in land assembly on the part of the City, are key factors in meeting the land requirements of industries in search of brownfield sites in Hamilton.

Promoting Brownfield Redevelopment in the City of Hamilton

The Environmental Remediation and Site Enhancement (ERASE) Community Improvement Plan (CIP) is a comprehensive set of programs designed to encourage and promote brownfield development in the older industrial area of Hamilton. This Plan was approved in August of 2001 and as its name suggests, the Plan is designed to "erase" brownfields by providing financial incentives to clean them up and replace them with productive economic land uses. This program is the first of its kind in Canada using Tax Incremental Financing (TIF).

The ERASE Plan was developed with the guidance and support of an Industrial Redevelopment Task Force formed in 1997 and comprised of 20 members from the real estate, development, government, banking, legal, environmental consulting and planning sectors. The Plan covers a 3,400 acre area but, consideration is already being given to expanding the area covered by the Plan to include the entire City of Hamilton. This will help to capture potential brownfield sites that are spread throughout the city such as gasoline stations, dry cleaners, and automobile wrecking yards.

The ERASE Plan contains the following programs:

ERASE Redevelopment Grants, which are tax-increment financing (TIF) grants to those undertaking brownfield development in order to pay for clean-up and associated costs. These grants will be funded through the tax increase that results from redevelopment of the property. Eligible costs include:

- environmental remediation and environmental studies;
- demolition; and,
- site preparation, including construction/improvement of on-site public works

Grants equal 80% of the municipal portion of the increase in property taxes that results from the redevelopment, payable annually for up to 10 years, after property taxes have been paid in full each year.

ERASE Environmental Study Grants provides grants for up to one-half of the costs of Phase II and Phase III Environmental Site Assessments, up to $10,000 per study.

ERASE Planning and Development Fees Program provides rebates for a series of planning and development fees.

ERASE Redevelopment Opportunities Marketing and Data Base Program is a municipally sponsored marketing program which is in place now to educate the development and real estate industry on the programs available through the ERASE CIP and redevelopment opportunities available in the older industrial area. This includes the development and maintenance of a brownfield database to supply information for the marketing and opportunities program and to monitor implementation of the ERASE CIP.

ERASE Municipal Property Acquisition, Investment and Partnership Program is a proactive municipal program to target key sites, e.g., waterfront brownfield properties, for municipal acquisition and/or partnerships with the private sector on the clean-up and redevelopment of these sites.

The ERASE Municipal Property Acquisition, Investment and Partnership Program will be bolstered by the greater powers given to municipalities under Bill 56 to acquire, plan for and control brownfield sites. Along with some of the new financial tools under Bill 56, this should give municipalities an enhanced ability to encourage and become actively involved in brownfield redevelopment. However, the new Provincial legislation will need to be thoroughly reviewed, and adjustments to the ERASE Plan and programs contained therein, will likely have to be made to incorporate these new tools. One of the most immediate modifications will be to expand the area covered by the Plan to include the entire municipality, which is now permitted under Bill 56.

The City of Hamilton is also pursuing several other programs to promote brownfield redevelopment. The first is a development charge program that offers targeted development charge exemptions for specific uses in the older industrial area. The second program is a program to review tax collection procedures on abandoned and contaminated properties. This program is designed to encourage the transfer of contaminated properties that have been abandoned by owners into the hands of bona-fide developers. This is done by agreement through the cancellation of tax arrears in such a way that the City never becomes an owner of the site. Again, this proposed program will have to be re-evaluated in light of the new Provincial brownfield legislation. Both these programs require separate enabling policy and Council approval, which will be sought in 2002.

Conclusion

This ERASE Plan and complimentary programs provide an economic tool that will help the City to accomplish its economic goals, as well as numerous other "public good" goals. These goals include:

- providing land to meet demand from industrial, manufacturing and port-related uses, and even some emerging sectors;
- increasing tax assessment and revenues in the long-run for the municipality and the Province;
- creating employment opportunities;
- utilizing existing infrastructure resulting in a reduction of urban sprawl and its related costs;
- contributing toward the revitalization of particular areas and neighbourhoods; and,
- restoring the environment in these neighbourhoods, which will in turn, remove threats to the health of workers and residents.

With the City of Hamilton ERASE CIP and the new brownfield legislation, brownfield redevelopment is a potentially powerful tool that the City can and should use to help accomplish its economic and planning goals.

Small Business Enterprise Centre

Economic Development Tool

Introduction

The Small Business Enterprise Centre, previously managed under the umbrella of the Business Advisory Centre, now reports directly to the City of Hamilton's Economic Development Department. It is jointly funded through a partnership with the Province of Ontario, MEDT and the City of Hamilton.

In November of 2001, the SBEC reopened their offices in downtown Hamilton within Jackson Square.

Definition: Small Business in Ontario

Small business is the backbone of Ontario's economy. Between 1994 and 1998, firms with less than 50 employees created an estimated 80% of the net new jobs in Canada[11]. About 98% of Ontario's 312,000 business establishments employ less than 100 employees. Further, about 57% (177,000 companies) employ less than five people. It is also significant to note that, every year, Ontario entrepreneurs register more than 100,000 new businesses[12].

A survey of new business registrants in Ontario reveals that new entrepreneurs and small business owners are:

- Young: more than 43% of new business starters are 25-34;
- Women: the number of women owning and operating businesses has doubled since the early 1980's;
- Well-educated: close to half of all entrepreneurs are university and college-educated.[13]

Major Trends and Issues

The outlook for starting a small business in Ontario has never been better. With a surging economy and government committed to helping small business grow and create jobs, prospective entrepreneurs operate in an environment conducive to success. But, small business is the most volatile segment of our economy. Starting a business can be tough, survival takes knowledge, skills and networks.

---

[11] *Ministry of Finance*
[12] *MCCR – Consumer and Business Services*
[13] *Ministry of Economic Development and Trade*

Survival Rates between 1989 and 1996[14] :

- Businesses fewer than 5 employees
  - 72% survived first year
  - 44% were still alive after 3 years
  - 33% were still alive after 5 years

SUPPORT SERVICES FOR SMALL BUSINESS IN ONTARIO

- The Ontario government provides a range of services to help these entrepreneurs start and grow their businesses
- It operates a network of Business Self-Help Offices (BSHOs) and Small Business Enterprise Centres (SBECs) in 38 communities across Ontario
- Hamilton is one of those communities

The mandate is to:

- Promote and encourage entrepreneurship as a viable career option – including development of entrepreneurial skills, qualities and opportunities for Ontario's youth
- Assist new entrepreneurs in the evaluation and process of business start-up
- Provide stability and early-stage growth support to existing small businesses (less than 5 years in operation and less than 10 employees) and improve the success rate

- These offices are supported through partnerships with municipal and federal governments, and in some cases the private sector
- The Ministry of Economic Development and Trade is the lead ministry in Ontario
- The network is a vital resource for Ontario's entrepreneurs

Ontario's Small Business Enterprise Centres and Business Self-Help Offices provide:

- One-stop and first-stop information from three levels of government on small business start-up and operations
- Information and guidance on rules/regulations, licensing and business registrations

---

[14] *Industry Canada*

- Consultation and assistance with business planning, market analysis, financial resource availability, management skills, growth planning and export readiness
- Workshops, seminars, on-line training courses, networking opportunities and mentoring
- Access to technology and the internet for planning and research through on-site workstations

- During 2000/2001 fiscal year, the offices:
  - Will handle in excess of 225,000 general inquiries
  - Conduct over 12,000 one-on-one consultations
  - Play an active role in the start-up of over 2500 new businesses
  - Deliver over 400 seminars and workshops
  - Co-ordinate and deliver provincial programs and networking events

In Hamilton the SBEC program is managed by the Economic Development Department of the City of Hamilton and in partnership with:

Ministry of Economic Development & Trade (Ontario)
Canada-Ontario Business Service Centre (industry Canada)
Hewlett Packard
RBC, Royal Bank
Business Development Bank of Canada
PricewaterhouseCoopers LLP
Simpson, Wigle LLP
Hamilton Chamber of Commerce
Hamilton Junior Chamber of Commerce
Teletron Communications Inc.

The City of Hamilton SBEC Programs:

The Small Business Enterprise Centre provides extensive information resources, consulting services, training programs and a mentoring program at the SBEC location in Jackson Square downtown Hamilton. The goal of the Centre is to provide a "one-stop shop" for the business owner and entrepreneur. The core services of the Centre can be grouped under the following headings:

- ✓ Resource Centre
- ✓ Consultation Services
- ✓ Mentor Services
- ✓ Training Programs

- ✓ Youth Programs
- ✓ Outreach

Resource Centre:

The Centre offers more than 40 hours/week of day access to the following reference material relating to small business:

- Business databases, directories and statistical information
- Computers with Internet access and business applications software
- Canada Ontario Business Service Centre Information (COBSC)*
- Computerised Business Registrations
- Government publications
- Small business-related publications for sale
- Videotapes and audio cassettes
- Knowledgeable staff

* The Canada-Ontario Business Service Centre provides comprehensive information on federal and provincial government services, programs and regulations. As a partner in the Centre they have agreed to provide reference materials and funding for additional programming support.

Consultation Services:

There is an overwhelming demand for access to advice in all stages of business development. Small business start-ups and currently operating businesses ranked access to advice as the most important service. The consultation and advisory services of the Centre begin with its support staff being well versed in general business information.

Detailed business information is available through a *free consultation service* with trained staff professionals. These consultants dedicate one hour per client to review and critique business plans and deal with business issues.

In order to service small businesses throughout the New City of Hamilton, SBEC staff is available at each *Municipal Service Centre (MSC)* 2 days per month. Again, the MSC's are: Dundas, Ancaster, Flamborough, Stoney Creek and Glanbrook. Clients can call 905-546-CITY and schedule an appointment direct' / with the MSC to meet with one of our consultants.

Mentor Services:

Should the client require more assistance, additional consultation services are available through an SBEC partnership program titled *'Access to Professionals'* sponsored by PricewaterhouseCoopers LLP and Simpson, Wigle LLP. The client can sit down for a 45-minute consultation with our program partner's local lawyers and accountants on a monthly basis.

The consultation process can be summarised as follows:

- Client receives general information from support staff member
- Client receives one-hour consultation with a staff business consultant
- Client receives additional 45-minute session with a local professional

It is our intention to expand on this service to include insurance, export and financial professional services in 2002-2003.

The SBEC also will continue to offer *'Bridges to Better Business'*. This is a one-day mentorship event held offsite. Its intention is to bring together start-up businesses and experienced businesses for a wisdom exchange. It also includes a keynote speaker address and trade fair. This event is co-delivered by the SBEC staff and the Ministry of Economic Development and Trade and the Business Development Bank of Canada.

Training Programs:

It has been found that a demand for low cost, practical small business workshops and training programs exists. The seminar program will include a *'Brown Bag Series'* offering free 1-hour seminars, a comprehensive twelve-hour *on-line training program* and *three-hour workshops* on a variety of topics.

It is felt that a demand for information on various topics; for example, small business start-up, market research and analysis, exporting, human resources and financial management will form the foundation of our programming. The training will be delivered through business consultants on staff and the support of volunteers from our centre partners and the local business community.

Youth Programs:

The SBEC is the local contact for *'Summer Company'* and *'My Company'* programs. The Centre staff will facilitate orientation sessions to provide information on these programs. We will also be the local contact for both the secondary and post-secondary schools throughout the City of Hamilton. Together with the assigned mentors, the SBEC will co-ordinate and deliver these programs.

The Centre will offer a *'Business Plan Competition'* to secondary schools in the Hamilton area. This annual spring event will be co-ordinated and delivered by the SBEC.

Outreach:

The outreach program will take on two forms:

1. Youth
2. Small Business Touchpoints

1. In promoting and supporting youth programs and youth entrepreneurship in general, the SBEC staff will work closely with both secondary and post-secondary institutions throughout the City of Hamilton. Monthly efforts will be made to establish speaking opportunities at the various schools. Students and classes will be encouraged to visit the SBEC either on their own or as part of a class tour. Introductions will continue to be made to provide that link directly with the teachers and the SBEC staff.

2. The SBEC staff will continue to attend and support various small business groups/organizations such as Chambers of Commerce (in the City of Hamilton we have 5 Chapters: Hamilton, Stoney Creek, Flamborough, Dundas and Ancaster), other networking groups, Employment Centres, Junior Achievement, Industry Education Council, Hamilton Public Library system, etc. As in the past, the SBEC staff will continue to address these groups in creating awareness for our program and in providing programming updates.

Conclusion

There are significant opportunities within Hamilton to expand the SBEC program, working with all levels of government and agencies to provide a more enriched program for small business startups. Based on the statistics about small business as a major driver of the Canadian economy, there are no drawbacks in providing this type of programming to entrepreneurs.

Sector Plan for the Small Business Enterprise Centre

The SBEC program will compliment the Municipal Service Centres programs and mandate by achieving the following short, medium and long term goals:

Short-term Deliverables:

- Establish the SBEC downtown centre as the 'information hub' or 'virtual office' to the Municipal Service Centres, to refer to and rely on for their community small business needs;
- Develop outreach strategies through the Municipal Service Centres;
- Investigate a dedicated phone line directly accessing the SBEC information services;
- Consider other connectivity requirements in encouraging ease of access to small business services;
- Set-up kiosks with small business information;
- Conduct information seminars at the various Municipal Service Centres; and

- Provide occasional staffing for consultation.

Medium-term Deliverables:

- Provide dedicated consultation/staffing; and
- Implement dedicated phone line and client work station for immediate access to the 'information hub' SBEC downtown location.

Long-term Deliverables:

- Hire permanent staff to handle the areas small business needs;
- Develop 'experts in the community' to provide onsite advisory services at the Municipal Service Centres one day per month; and
- Implement regular seminar/workshop programming.

Hamilton Incubator of Technology (HIT)

Economic Development Tool

Introduction

The Hamilton Incubator of Technology is a 40,000 square foot building wholly owned and operated by the City of Hamilton. The space in the incubator is available for lease to technology business start-ups in order to provide them with an environment, which facilitates success of the business venture. HIT was the first incubator created in Ontario with a technology focus.

Industry Overview

The NBIA (National Business Incubation Association) defines an incubator as "an economic development tool designed to accelerate the growth and success of entrepreneurial companies through an array of business support resources and services. The main goal of an incubator is to produce successful firms that will leave the program financially viable and freestanding.

Goals of an Incubator are to facilitate graduates who will create jobs, revitalize economies, commercialize new technologies and strengthen local economy via reducing small business failures.

Major Trends

The federal government (Advisory Council on Science & Technology) recommended in Feb/2000 the "creation of 15-20 regional incubators on the campuses of universities and colleges, to provide scientific, technical and business services and advice"

NBIA (1998) found that incubators:

- Create 12 jobs per firm (1/3 more than other firms)
- Reduce small business failure rate from 67% within 5 years to 13%
- Retain 84% of graduates within the community
- Provide a $4.96 ROI on operating costs to the community

Growth of incubators in the US has been rapid from12 in 1980 to about 800 in 2001. The UK has also seen rapid growth from 25 in 1998 and 80 in 2001 but Canada has been very slow increasing from 6 to only about 30.

Success Factors

1. The most important need is mentorship. Typically entrepreneurs have strong technical skills but lack business and management skills;

2. They need a professional building to house their offices. Typically they have outgrown their home based business (HBB) space and are at stage in their development that they need more space at a reasonable rate to facilitate growth;

3. Tenants need administrative support in the form of shared reception, meeting rooms, boardrooms and photocopying and mail services; and

4. They need 'peer learning' opportunities to share experiences with fellow entrepreneurs, at the same stage of growth, and to network to their particular cluster group.

Sector Plan for the Hamilton Incubator of Technology

Short-Term Deliverables:

- Stimulate new business growth within the technology sector with specific attention to information, environmental and biotechnology;

- Reduce the risk of small business failures by providing mentorship and assistance to incubated firms at the initial stage of development;

- Accelerate the growth of new firms in the creation of new jobs and continue efforts to diversify the local community;

- Work closely with local agencies, educational institutions, large and small private organizations in developing a 'technology cluster';

- Strengthen the network of community support for technology by establishing advisory services to the tenants and stakeholders;

Medium-Term Deliverables:

- A full-time Program director to handle the mentorship program as well as the building of the technology cluster as it relates to the incubator;

- Improvements in the physical structure build in 1993. Specifically repairs to floor, building inspection, expansion space (10,000 sq. ft.) and improvements to roof; and

- Upgrades to office services equipment and networking facilitation within the building should also be considered.

- Develop a 'graduate program' for resident clients who are still requiring mentorship, administrative services and professional space as they move from the development to growth stages of their business plans;

- Expand space at the existing 'undergraduate' location to accommodate the waiting list of technology firms wanting and needing assistance;

- Improve the current incubator's services and physical structure to present a more professional appearance and save long-term high costs of physical repairs; and

- Expansion program to cover a 'graduate residence' for resident clients in their growth stage of development with advanced mentoring to meet their new levels of business and management skill.

The SBEC program will further compliment the Incubator programs in Hamilton by playing an active role in fostering and facilitating the start-up and early growth companies by:

Short-Term Deliverables:

- Consultation availability on a regular basis (half day per month) at the Hamilton Incubator of Technology (HIT) and the E-Cluster Initiative for their tenants.

Medium-Term Deliverables:

- Developing programming and mentoring/advisory services for the Incubator programs.

Long-Term Deliverables:

- Co-ordinate the development of a downtown General Incubator where the Hamilton SBEC program will co-exist;

- Provide a direct link to financial support for small businesses in the Hamilton area;

- Developing programming and mentoring/advisory services in partnership with other community stakeholders; and

- Develop private sector partnerships where they play an active role in the new SBEC program and General Incubator, e.g.: A small business retail service centre co-located providing an opportunity for legal, accounting, insurance, technology and telecommunication firms to have a satellite office and/or consignment products to service the SBEC clients.

Economic Development Information System

Economic Development Tool

Introduction

The City of Hamilton stands at a threshold in its economic development program. The amalgamation of the former Regional Municipality and the six area municipalities into a single municipal structure necessitates a major consolidation of existing information into a single database. The Economic Development Department is using this opportunity to ensure that its information system is capable of responding adequately to time sensitive development inquiries and that information is communicated in an efficient manner that best represents the opportunities for development in the new city.

Major Trends and Issues

Advances in information technology have fundamentally altered the way in which economic development agencies function. In the last five years for example, the Internet has emerged as the single most important tool for disseminating information in virtually every field of endeavour, including economic development.

A study released in 2000 by the US site location-consulting firm Whittacker & Associates, found that 84% of American companies now use the Internet to gather preliminary information on the communities under consideration during their site selection process.

Most effective economic development agencies now invest as much in the development and maintenance of their web-site as in printed materials. It is not uncommon for a community web-site to include forty to fifty pages of detailed data, including labour force, demographics, education, income - in fact the full panoply of census and labour force data. A number of communities now also provide "searchable" business directories on- line.

The most recent innovation in economic development is Internet-based GIS (Geographic Information Systems) data, providing graphic displays of available industrial & commercial sites and buildings for sale or lease, including specific information about the utilities, transportation routes, labour force and census information for the area.

Because of the availability of these new tools, Richard Sheehy, an American site location consultant (Industrial Design Corp., Portland OR) observed in a recent interview with Site Selection Magazine that information technology has fundamentally altered the relationship between site location consultants and

economic development officers. Quoting Mr. Sheehy, "**the transfer of the information is now immediate - overnight is no longer good enough**".
Recognizing that general information about most communities can now be obtained through the Internet (and other sources) municipalities need to develop the capability to respond to very specific questions in a timely manner. To achieve this requires detailed databases covering a wide range of topics used by the development officer for immediate reference. The new standard for "investor servicing" is to be able to e-mail responses to specific questions while still on the phone with the inquirer.

Vision

The implementation of an information system which will not only organize and present data on the City of Hamilton in a "user friendly" format, but also capture information on client activity through a new Client Tracking and Reporting System, to help improve the effectiveness of the overall Economic Development Program.

Plan for the Economic Development Information System

The Economic Development Department is actively working with both the GIS and Websolutions divisions of the City of Hamilton Information Technology Department to formulate a system that can respond to the needs of business. Other partners include the Hamilton Public Libarary and Hamilton Connects. The Corporate Communications department is also involved in the development of this project to ensure a consistent corporate look with their City wide initiatives. This working group is currently establishing guidelines to design a comprehensive new structure for Hamilton's databases and client tracking system, incorporating the best features of other systems.

Economic Development proposes to incorporate the following elements into its new economic development information system:

GIS Real Estate Inventory - A searchable database of sites & buildings linked to the city's other GIS databases showing utilities, census division data, traffic counts, assessment data and aerial photography. This element of the information system is well under development and has been given conditional approval by the Hamilton Real Estate Board.

Community Profile - A comprehensive community profile is one of the most fundamental tools of an economic development organization. It is generally in tabular form, summarizing most of the information required to respond to specific investor inquiries from prospective investors. It also serves as a research tool for strategic planning and developing marketing programs. Topics within the profile would include demographic characteristics, quality of life characteristics, utility rates, tax rates etc.

Business Directory - A Searchable database of the city's 14,000 + businesses, based on the NAICS indices and providing extensive descriptions of the products, services and capabilities of businesses in the community. The City of Hamilton is working on this initiative in conjunction with Hamilton Connects, a not-for-profit organization whose mandate is to assist local community organzations to meet service delivery goals through innovative and technology driven solutions.

Labour Force Profile - Showing worker availability in Hamilton by skills and the range of salaries/wage rates by occupation. This will be pursued in conjunction with the Hamilton Human Resource Development Corporation

Economic Development Newsgroup/Electronic Newsletter - Updated often, with notices e-mailed to Hamilton's network of clients and facilitators. Information would be sent to key location decision-makers i.e. site selection companies, realtors, lawyers, accountants etc.

Client Tracking System - To record and monitor all client activity and enhance client servicing capabilities of the Economic Development Department. This will be a practical tool to measure performance and prepare reports to council and the senior administration on the results of Hamilton's economic development program.

The City has received $106,000 from the Industry Canada's Program for Export Market Development to initiate the development of this information system. The system is well under development and various aspects should be launched in early 2002.

Quick Response Team

Economic Development Tool

The City of Hamilton has listened to the concerns of the development community regarding the development process. The City acknowledges that old outdated zoning by-laws and the lack of Infrastructure Master Plans are at the root of the underlying problem that often requires developments to go through an Official Plan and/or rezoning process, that might otherwise not be required. To this end, the City has committed, as a priority, that a new Official Plan and Zoning By-law will be developed with the aim of making the By-law simpler and less bureaucratic. In addition, the Mayor has established **Open for Opportunity Taskforce** that will continue to work of reviewing processes on a continuous improvement basis, to ensure that the processes in the City of Hamilton are viewed as a best practice for other municipalities to follow.

Complementing the above-noted initiatives, the concept of a **Quick Response Team** is recommended as a means to address business attraction initiatives when there is knowledge that a company is searching for a plant location; major development inquiries; as well as labour adjustments and plant closures. The Quick Response Team (QRT) would be comprised of senior staff from Economic Development, Planning/Building, and Transportation/Operations/Environment Departments. Staff from other departments such as Finance, Real Estate and Legal Services, would be brought in on an "as required" basis. Once formed, the QRT will establish a protocol for handling development issues of this nature with the objective of responding expeditiously to significant development issues.

The rationale for the formation of a QRT is that major issues relating to new and existing development need to be quickly assessed by a cross-departmental group. It is not the intention that this group become a means by which routine proposals can "jump the queue" for processing. Rather, this group would deal with non-routine matters of significant scope. It would ensure that opportunities are not lost because of the time it might take to address multiple issues across numerous departments. Instead of addressing issues sequentially, the QRT provides a comprehensive pre-consultation assessment in a timely manner.

Mandate of the Quick Response Team

To coordinate and expedite development approvals, facilitate zoning/land use conflicts, and respond to labour adjustment and business retention issues.

Hamilton Human Resource Strategy Study

(completed May 2002)

Economic Development Tool

Introduction:

The Economic Development Department undertook a major project to develop a new Economic Development Strategy for the City of Hamilton. Enhanced by data from key stakeholders and community partners, the Economic Development Strategy identified a "cluster" approach with six key sectors: Health & Biotechnology; Information & Communications Technology; Film; Agri-Business; Industrial Manufacturing; and Airport. To complement the new strategy, the City of Hamilton's Economic Development Department obtained funding through Human Resources Development Canada's (HRDC) Local Labour Market Partnership Program and Hamilton Training Advisory Board (HTAB) to examine the labour market conditions projected for Hamilton's economy between now and the year 2021.

Together, the City Of Hamilton, the local HRDC office, HTAB, Dofasco, Tradeport International Corporation, Hamilton Health Sciences Corporation, Hamilton Chamber of Commerce, Mohawk College, Industry Education Council, Ministry of Economic Development & Trade, worked with e-Conomics Consulting to investigate the human resource needs of the community. Labour force priorities, gaps, supply/demand opportunities, strategies are being addressed, while heightening the awareness of our City-wide current and future labour market issues.

Labour demand and supply issues are complex. A large number of variables changing over time affect Hamilton's labour markets. The Hamilton Human Resource Strategy Study or HR MATTERS Study, is looking at the most critical aspects of Hamilton's labour market needs and future requirements with involvement from major stakeholder groups, private sector representatives and employer groups.

Elements Examined:

The Study comprises an on-line survey, David Foot luncheon presentation, in-depth sector specific interviews, Hamilton City Council presentation and Community Forum to gain insight on the looming labour shortage while educating stakeholders to prepare for long – term solutions. Elements include:

* Total labour demand and supply between 2001 and 2021 including:
- breakouts by 5 year age cohorts

- breakouts by industry sectors and occupational groups such as traditional manufacturing, E-business, healthcare/biotechnology, Airport development/distribution/assembly
- distinguish labour demand due to: retirement or attrition, growth and expansion of existing firms/organizations, location of new firms, etc.
- identify contribution of specific components of labour supply including: immigration, net migration, school graduates, unemployed, and underemployed – single mothers, disabled, etc.

* Labour supply and demand for specific occupational groups including manufacturing trades, critical occupations in health care, educational and technology sectors, construction trades

* Examine the balance between labour supply and demand over the 20 year period in an overall context with specific occupational groups and industry sectors

* Investigate the availability and effectiveness of labour market adjustment and mechanisms such as: educational system curriculum and special programming, governmental and institutional organizational tools and programs, employers' human resource practices

* Determine the impact, if any, that the 1985-strategy approach to economic development had in reshaping Hamilton's labour markets by 1996. This assessment needs to look at what supporting programming/infrastructure was established and was it effective in moving Hamilton's economy in the desired direction. The lessons derived from this analysis are essential in tailoring the human resource component of the new Economic Development Strategy to achieve the desired "clusters & corridors" strengthening.

* Publish and release the final report findings and opportunities to City Council and at a community forum with business leaders

* Launch the public awareness program with on-line survey, advertising and David Foot Luncheon Presentation and final report findings on the City's website

Key Considerations:

Hamilton needs to understand how the market for workers will likely develop over the next 20 years. With that knowledge we can make educated choices about directions and activities we need to pursue, now. By 2011, labour markets will become tighter than any of us have ever known or had to cope with. The baby-bust phenomenon will guarantee it. Beginning around 2011 and continuing for

the next 20 years baby boomers will retire in greater numbers than the total of their sons and daughters entering the workforce for the first time. Hamilton has:

* an older than average population, primarily due to years of out-migration in population

* a primary manufacturing labour force in long term decline

* congested road transportation infrastructure

* proximity to Toronto

* unified municipal governance structure

* affordable housing

* first–rate multi-tiered educational and healthcare system

* sophisticated business and financial infrastructure

* vibrant and diverse secondary manufacturing sector

Deliverables:

Human resource needs are community issues that must be addressed by those organizations dealing with the "supply" side and the "demand" side. Industry organizations such as the Industry Education Council, Chambers of Commerce, Hamilton-Wentworth Training Board, and Economic Development can help identify the human resource needs. The City's educators; specifically, McMaster University, Mohawk College, Redeemer University College, Columbia College, Hamilton-Wentworth Board of Education and the Hamilton-Wentworth District Separate School Board must respond by delivering a product that meets these needs. Working together, these service providers will address not only Hamilton's existing human resource needs, but the needs of the future.

- Determination of our future human resource needs
- Encourage local business/industry to start succession planning
- Support local business' retention and recruitment efforts
- Provide forecasts for effective community/municipal long term employment planning
- Assist the local community to influence immigration support, training and other creative adjustment mechanisms
- Establish a broad inventory of best practices and a framework for developing local partnerships to implement them

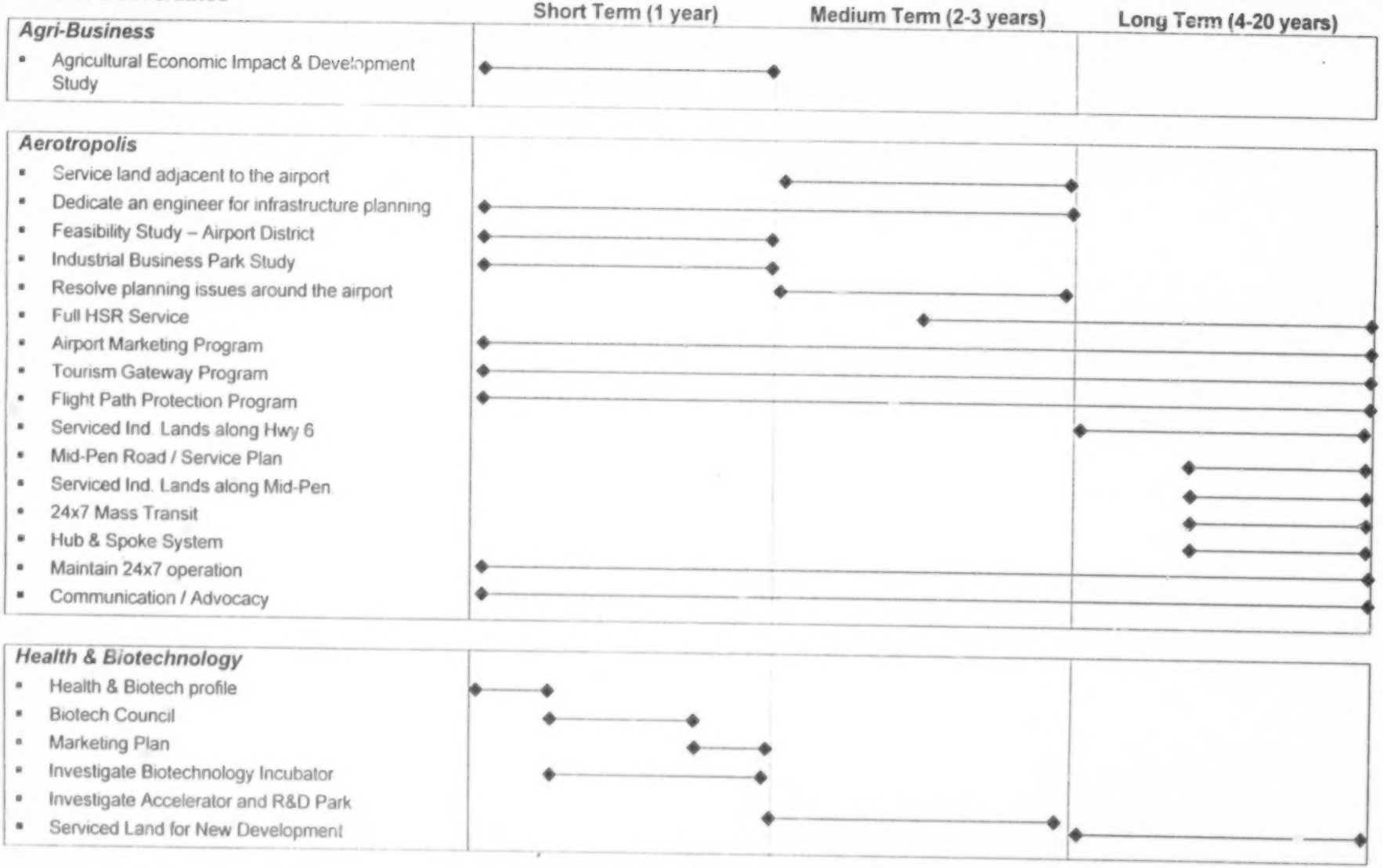
Summary of Deliverables

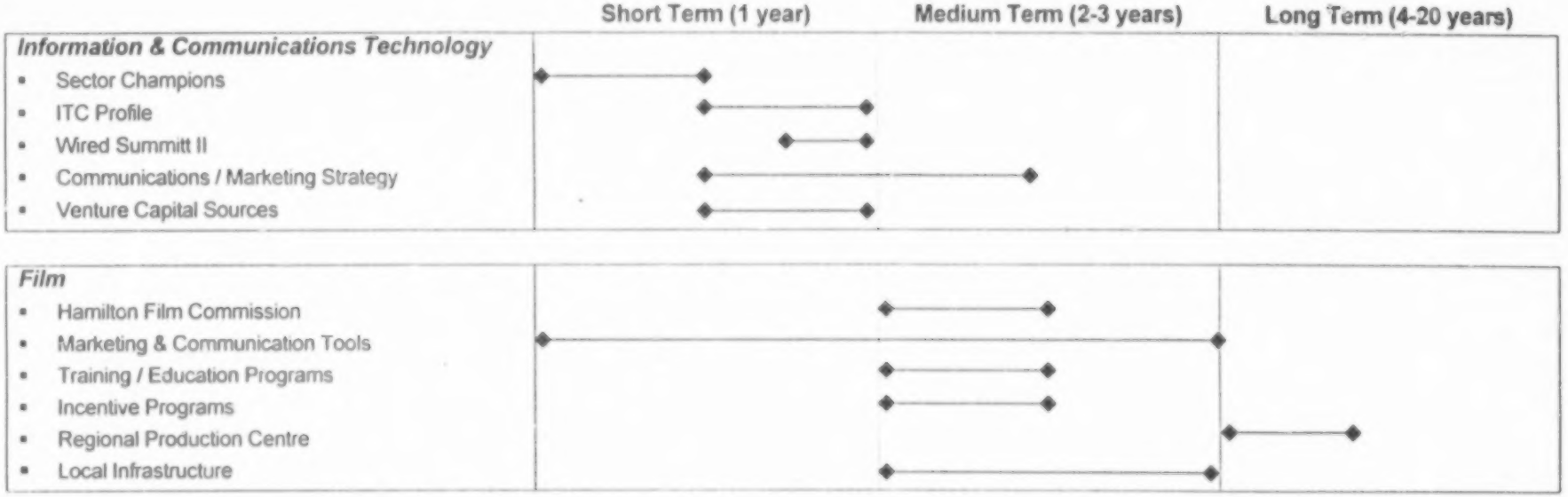
Economic Development Strategy

Deliverables for all Clusters	Short Term (1 year)	Medium Term (2-3 years	Long Term (4-20 years)
• **HR Matters Project - A study in conjunction with HRDC to address human resource issues across all sectors**			
• **Quick Response Team**			

Cluster Deliverables	Short Term (1 year)	Medium Term (2-3 years)	Long Term (4-20 years)
Industrial Manufacturing			
• Further reduction of non-residential property taxes			
• Industrial Info. System – GIS Inventory			
• Upgrade McNeilly Rd.			
• Fibre in Ancaster IBP			
• Tradewinds Dr. Extension			
• Marketing Campaign			
• ERASE tax arrears cancellation policy			
• Revisions to ERASE program			
• Serviced lands east of McNeilly Road			
• Decision on Perimeter Rd.			
• West Harbourfront Development Plan			
• ERASE Acquisition Program			
• New Zoning & Official Plan			
• Serviced land along Mid-Pen. Corridor			
• Relocation of CN Rail Stuart St. Marshalling Yard			

Cluster Deliverables




Short Term (1 year)
Medium Term (2-3 years)
Long Term (4-20 years)
Information & Communications Technology
Sector Champions
ITC Profile
Wired Summitt II
Communications / Marketing Strategy
Venture Capital Sources
Film
Hamilton Film Commission
Marketing & Communication Tools
Training / Education Programs
Incentive Programs
Regional Production Centre
Local Infrastructure